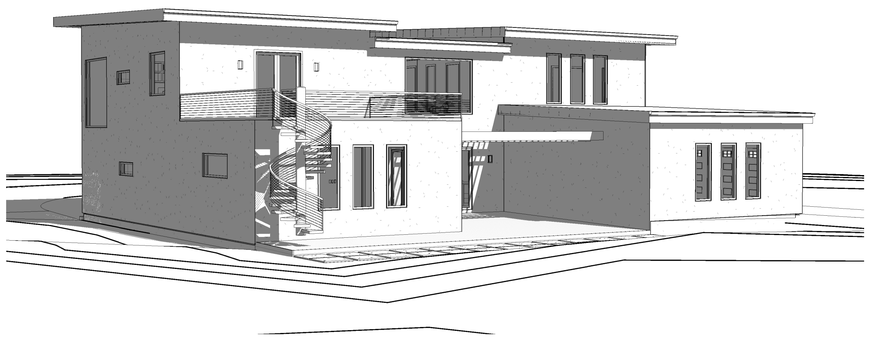
1 PERSPECTIVE - SOUTHWEST



2 PERSPECTIVE - NORTHEAST

3 INTERIOR KITCHEN VIEW

JURISDICTION:

JEFFERSON CO.

ZONING:

HEIGHT RESTRICTIONS:

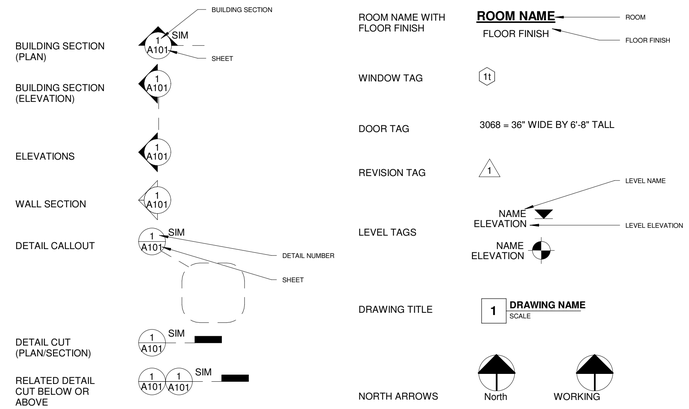
SETBACKS:

20' -0" FRONT SETBACK
10'-0" SIDE SETBACKS
15'-0" REAR SETBACK

FOR CLIMATE ZONE 13 PER 2009 IRC ?

MAXIMUM GLAZING U-FACTOR	.35
CEILINGS	R-38
WALLS	R-21
FLOORS	R-38
BASEMENT WALLS	R-19
SLAB PERIMETER R-VALUE & DEPTH	R-9, 4 FT.
CRAWL SPACE WALLS	R-21

CODE INFORMATION
1/2" = 1'-0"



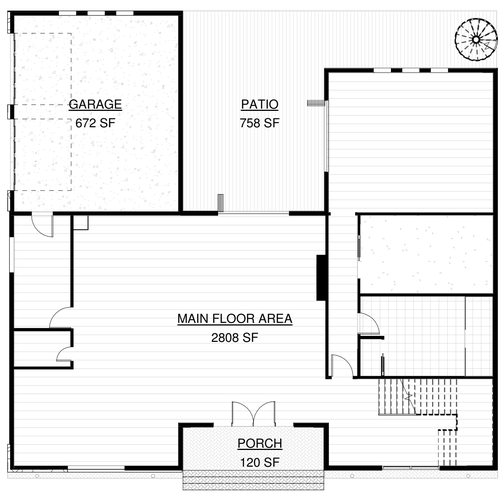
DRAWING SYMBOL LEGEND

OVERALL WINDOW SCHEDULE						
TYPE MARK	TYPE	WIDTH	HEIGHT	COUNT	Sill Height	Head Height
A	Fixed 10' x 9'	9' - 0"	9' - 0"	1	-8"	8' - 4"
B	Casement 60" x 60"	5' - 0"	5' - 0"	4	3' - 0"	8' - 0"
C	Casement 20" x 60" dark	1' - 8"	5' - 0"	3	2' - 0"	7' - 0"
D	Casement 60" x 20" dark	5' - 0"	1' - 8"	3		
E	Casement 30" x 80" dark	2' - 6"	6' - 8"	9		
F	8' x 8'	8' - 0"	8' - 0"	2	2' - 0"	10' - 0"
G	Casement 80" x 30" dark	6' - 8"	2' - 6"	1	5' - 2"	7' - 8"
H	Fixed 10' x 7'h	10' - 0"	7' - 0"	1	1' - 0"	8' - 0"
I	Casement 40" x 20" dark	3' - 4"	1' - 8"	1	5' - 0"	6' - 8"

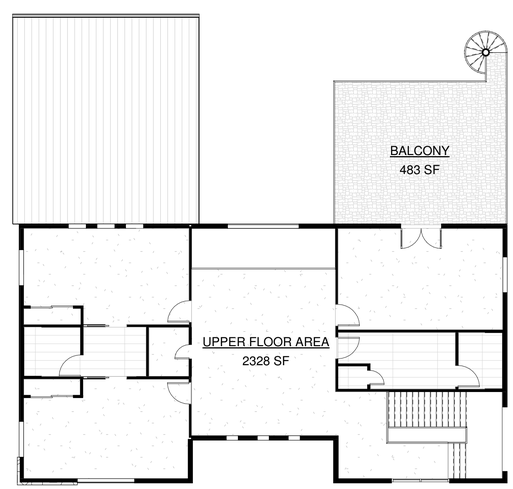
Grand total: 25

OVERALL DOOR SCHEDULE				
CONSTRUCTION TYPE	WIDTH	HEIGHT	COMMENTS	COUNT
10' X 8' OVERHEAD GARAGE DOOR	10' - 0"	8' - 0"		2
245	2' - 6"	8' - 0"		2
2080	2' - 0"	8' - 0"		3
2680 PCKT	2' - 6"	8' - 0"		1
3080	3' - 0"	8' - 0"		9
3080 GLASS	3' - 0"	8' - 0"		1
3080 PCKT	3' - 0"	8' - 0"		3
6068	6' - 0"	8' - 0"		2
6080 GLASS		8' - 0"		2
10080 GLASS	10' - 0"	8' - 0"		2

Grand total: 27



4 MAIN FLOOR AREA PLAN
1" = 10'-0"



5 UPPER FLOOR AREA PLAN
1" = 10'-0"

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contact Lance Cayko

Owner
Name
Address
City/State
p
f
e
contact

NOT FOR CONSTRUCTION

FRONT RANGE COMMUNITY COLLEGE

DRAWING LIST	
NO.	NAME
A0	COVER
A0.1	GENERAL ARCHITECTURAL NOTES
A1	SITE PLAN
A2	MAIN FLOOR PLAN
A3	UPPER FLOOR PLAN
A4	ROOF PLAN
A5	NORTH AND SOUTH ELEVATIONS
A6	EAST AND WEST ELEVATIONS
A7	BUILDING SECTIONS
A8	BUILDING SECTIONS
A9	BUILDING SECTIONS
A10	WALL SECTIONS AND DETAILS
A11	MAIN FLOOR REFLECTED CEILING PLAN
A12	UPPER FLOOR REFLECTED CEILING PLAN
A13	DETAILS AND INTERIOR ELEVATIONS
A14	EXTERIOR PERSPECTIVES
A15	INTERIOR PERSPECTIVES
E1	MAIN FLOOR PLAN - CONCEPTUAL ELECTRICAL PLANS
E2	UPPER FLOOR PLAN - CONCEPTUAL ELECTRICAL PLANS
S0	STRUCTURAL GENERAL NOTES AND COMMON DETAILS
S1	FOUNDATION PLAN
S1.1	3D - FOUNDATION VIEW
S2	MAIN FLOOR FRAMING PLAN
S2.1	3D - MAIN FLOOR FRAMING VIEW
S3	UPPER FLOOR FRAMING PLAN
S3.1	3D - UPPER FLOOR FRAMING VIEW
S4	ROOF FRAMING PLAN
S4.1	3D - ROOF FRAMING VIEW

AREA SCHEDULE	
NAME	AREA
MAIN FLOOR AREA	2808 SF
UPPER FLOOR AREA	2328 SF
PATIO	758 SF
GARAGE	672 SF
BALCONY	483 SF
PORCH	120 SF
Grand total: 6	7169 SF

GRATTAROLA RESIDENCE
3645 W 112th Ave
Westminster, Colorado 80031

FRONT RANGE COMMUNITY COLLEGE

A0
COVER

5/4/2021 8:14:35 PM

NOT FOR CONSTRUCTION

FRONT RANGE COMMUNITY COLLEGE

GENERAL CONSTRUCTION NOTES:

1. CONTRACTOR SHALL COMPLY WITH ALL CASTLE ROCK BUILDING DEPARTMENT REQUIREMENTS AND AMENDMENTS TO APPLICABLE CODES.
2. STRUCTURAL DRAWINGS SHALL SUPERCEDE ANY DESIGN REQUIREMENT IN CONFLICT WITH ARCHITECTURAL DRAWINGS, HOWEVER THE ARCHITECT OF RECORD SHALL BE IMMEDIATELY NOTIFIED OF ANY MAJOR DESIGN CHANGE AS A RESULT OF STRUCTURAL PRECEDENCE AND CONSULTED FOR DESIGN ADJUSTMENT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3. CONTRACTOR SHALL FIELD-VERIFY ALL DIMENSIONS, MATERIALS, AND SITE CONDITIONS PRIOR TO CONSTRUCTION.
4. ALL WALL DIMENSIONS ARE TO FACE OF STUDS AND CONCRETE OR MASONRY, UNLESS NOTED OTHERWISE. (U.N.O.)
5. THE CONTRACTOR AND ALL SUBCONTRACTORS ARE TO EXAMINE AND VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS, BOTH ON PLANS AND IN THE FIELD PRIOR TO CONSTRUCTION. THE ARCHITECT OF RECORD SHALL BE NOTIFIED OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO PROCEEDING WITH CONSTRUCTION.
6. THE CONTRACTOR SHALL NOTIFY ALL UTILITIES FOR LOCATION AND SIZE PRIOR TO ANY DIGGING EXCAVATION OR CONSTRUCTION.
7. CONTRACTOR SHALL VERIFY LOCATION OF, BUT NOT LIMITED TO, THE FOLLOWING (WHEN AND WHERE APPLICABLE)

7.1. PROPERTY LINE
7.2. UTILITIES AND THEIR LOCATION
7.3. GRADES AT DRIVE AND ENTRANCES, DRIVE, AND PARKING AREAS
7.4. GRADES AT BUILDING AND BUILDING ENTRANCES
7.5. TREE AND SHRUBBERY LOCATIONS
7.6. STORAGE BUILDING LOCATION
7.7. ALL REGRADING AND PAVING

8. IN THE EVENT OF CONFLICTS, EXPLANATORY NOTES IN THE DRAWINGS TAKE PRECEDENCE OVER GRAPHIC INDICATIONS: LARGE-SCALE DRAWINGS AND DETAILS TAKE PRECEDENCE OVER SMALLER-SCALE DRAWINGS, AND FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
9. DIMENSIONS TAKE PRECEDENCE OF DRAWING INFORMATION (DO NOT SCALE IN FIELD FOR CONSTRUCTION).
10. MATERIALS SUCH AS, BUT NOT LIMITED TO, GYPSUM BOARD, SHEATHING AND PLYWOOD MAY BE EXAGGERATED ON DRAWINGS FOR CLARITY

GENERAL FOUNDATION AND CONCRETE NOTES:

11. FOUNDATION AND SOILS REPORTS SHALL BE PREPARED BY A COLORADO REGISTERED ENGINEER AND SHALL BE ON SITE FOR THE FIRST REQUIRED INSPECTION.
12. FINISH GRADE SHALL BE 6" MINIMUM BELOW UNTREATED WOOD AND A MINIMUM OF 6" SLOPE IN FIRST 10'-0" AWAY FROM THE STRUCTURE.
13. PROVIDE DAMPPROOFING ON EXTERIOR OF ALL FOUNDATION WALLS
14. FOUNDATION DRAINAGE TO BE VERIFIED WITH SOILS REPORT AND FOUNDATION PLAN EITHER PREPARED BY THE ARCHITECT OR ENGINEER.
15. SLAB ON GRADE FLOORS SHALL BE 4" THICK CONCRETE WITH ½" EXPANSION JOINTS AT ALL EDGES, UNLESS NOTED OTHERWISE (U.N.O.)
16. FOUNDATION CONCRETE WALLS SHALL BE 8" THICK REINFORCED CONCRETE, UNLESS NOTED OTHERWISE (U.N.O.)
17. SLOPE ALL CONCRETE EXTERIOR FLAT WORK AT ¼" PER FOOT MINIMUM AWAY FROM THE STRUCTURE TO PROVIDE PROPER DRAINAGE
18. ALL SLABS ON GRADE SHALL BE SUBJECT TO THE FOLLOWING TOLERANCES:

18.1. FLATNESS – ALL CONCRETE FLOORS SHALL NOT HAVE PITS, DEPRESSIONS, BULGES OR AREAS OF UNLEVELNESS EXCEEDING ½" IN 32" UNLESS NOTED OTHERWISE (U.N.O.) ON THE PLANS FOR AREAS SPECIFICALLY DESIGNED FOR DRAINAGE.
18.2. LEVELNESS – ALL CONCRETE FLOOR SHALL BE PLACES LEVEL OR HORIZONTAL WITHIN 1/240 OF THE WIDTH OR LENGTH UNLESS NOTED OTHERWISE (U.N.O.) ON THE PLANS FOR THE AREAS SPECIFICALLY DESIGNED FOR DRAINAGE.
18.3. OFFSETS ALL CONCRETE FLOOR SURFACES SHALL MATCH SURROUNDING AREAS. DOORWAYS, ENTRANCES, AND OTHERWISE SIMILAR SURFACES SHALL BE A MAXIMUM OF ¼" OFFSET
18.4. ALL INTERIOR FLOORS WITH DRAINS ARE SLOPED A MINIMUM OF 1/8" PER FOOT TO DRAIN, UNLESS NOTED OTHERWISE (U.N.O.)

19. CONTROL JOINTS SHALL BE PROVIDED IN ALL CONCRETE FLOOR SLABS AND MASONRY WALLS WHETHER OR NOT SPECIFICALLY REFERENCED ON PLANS. THE MAXIMUM AREA PERMITTED BETWEEN JOINTS SHALL BE 400 SQUARE FEET FOR REINFORCED CONCRETE SLABS, 200 SQUARE FEET FOR NON-REINFORCED SLABS AND 400 SQUARE FEET FOR MASONRY UNLESS SHOWN OTHERWISE.
20. WOOD BEARING ON OR INSTALLED WITHIN ½" OF MASONRY OR CONCRETE TO BE TREATED WITH AN APPROVED PRESERVATIVE. SOLID BLOCKING OF NOT LESS THAN 2x THICKNESS SHALL BE PROVIDED AT ENDS AND ALL AT ALL SUPPORT OF JOISTS AND RAFTERS. TYPICAL SILL ANCHOR BOLTS TO BE ½" DIAMETER @ 4'0" UNLESS NOTED OTHERWISE (U.N.O.). 7" MINIMUM EMBEDMENT. ALL METAL FRAMING ANCHORS AND HANGERS SHOWN ON DRAWINGS SHALL BE SIMPSON STRONG-TIE CONNECTORS, OR APPROVED EQUIVALENT.

GENERAL WOOD PRODUCTS NOTES:

21. PLYWOOD – ALL PLYWOOD WALL SHEATHING SHALL BE 7/16" APA RATED OSB SHEATHING UNLESS NOTED OTHERWISE (U.N.O.). ALL PLYWOOD ROOF SHEATHING SHALL BE 15/32" APA RATED OSB SHEATHING UNLESS NOTED OTHERWISE (U.N.O.). MINIMUM NAILING SHALL BE 8D @ 6" O.C. AT PANEL EDGES AND 12" O.C. IN FIELD. SPAN INDEX SHALL BE 24/0. ALL PLYWOOD FLOOR SHEATHING SHALL BE ¾" OSB TONGUE AND GROOVE UNLESS NOTED OTHERWISE (U.N.O.). MINIMUM NAILING SHALL BE 10D @ 6" O.C. @ PANEL EDGES AND 12" O.C. IN FIELD. SPAN INDEX SHALL BE 40/20. STAGGER ALL PANEL EDGES AT ROOF, WALL, AND FLOOR SHEATHING. CDX PLYWOOD PRODUCTS OF EQUIVALENT SPAN RATINGS SHALL BE ALLOWED.
22. GLUE LAMINATED TIMBERS – ALL GLUE LAMINATED TIMBERS SHALL BE DOUGLAS-FIR LARCH, FABRICATED TO THE REQUIREMENTS OF THE US PRODUCTS STANDARDS PS56. LUMBER SHALL BE OF SUCH GRADE TO PROVIDE NORMAL WORKING STRESS VALUES OF 2,400 PSI, 1,100 PSI IN TENSION, 1,600 PSI IN COMPRESSION PARALLEL GRAIN, 560 PSI IN COMPRESSION PERPENDICULAR TO GRAIN AND 165 PSI HORIZONTAL SHEAR (COMBINATION 24F-V4). GLUE LAMINATED TIMBERS TO BE AITC CERTIFIED, USE WATERPROOF GLUE.
23. APPROVED ANCHORS AND/OR CLIPS SHALL BE USED AT TRUSS AND ROOF FRAMING TO WALL CONNECTIONS.

GENERAL ROOFS, FASCIA, AND SOFFIT NOTES:

24. ALL ROOFS SHALL BE 50 YEAR ARCHITECTURAL STYLE ASPHALT SHINGLES OVER 15LB ASPHALT IMPREGNATED UNDERLAYMENT UNLESS NOTED OTHERWISE (U.N.O.). GRACE ICE AND SHIELD UNDERLAYMENT TO BE INSTALLED ON ALL ROOF EAVES AND VALLEYS PER ROOF PLAN DRAWINGS. GALVANIZED FLASHING SHALL BE PROVIDED UNDER GRACE ICE AND WATER SHIELD IN ALL VALLEYS.
25. ALL RAKED SOFFIT BOARD SHALL BE FIBER-CEMENT NON-PERFORATED SOFFIT PANELING.
26. ALL EVE SOFFIT BOARDS SHALL BE FIBER-CEMENT PERFORATED SOFFIT PANELING.
27. ALL FASCIA BOARDS SHALL BE 4/4 x 1x8 UNLESS NOTED OTHERWISE (U.N.O.).
28. TYPICAL OVERHANGS SHALL BE 1'-0" UNLESS NOTED OTHERWISE (U.N.O.).
29. PROVIDE ROOF GUTTERS AND DOWNSPOUTS AS INDICATED PER THE DRAWINGS. SLOPE ALL GUTTERS TO DOWNSPOUTS. GALVANIZED DOWNSPOUTS TO HAVE 4'-0" MINIMUM ADJUSTABLE EXTENSIONS

GENERAL PENETRATION NOTES:

31. ALL EXTERIOR OPENINGS OR WALL PENETRATIONS EXPOSED TO WEATHER ARE TO BE FLASHED AND SEALED WITH SEALANT TO PREVENT MOISTURE AND AIR INFILTRATION. PROVIDE ALL FLASHING AND COUNTER FLASHING ITEMS AS INDICATED AND AS REQUIRED TO MAKE COMPLETED WORK WATERPROOF. FLASHING SHALL BE BRAKE FORMED TO SHARP LINES AND FITTED TO ALL DETAILS. FLASHING AND COUNTER FLASHING AT ALL ROOF-TO-WALL- CONDITIONS. FLASH ALL EXTERIOR DOORS AND WINDOWS PER MANUFACTURER'S APPROVED METHODS AND MATERIALS WHICH CONFORM TO LOCAL AND APPLICABLE CODES.

GENERAL EXTERIOR WALL FINISH NOTES:

32. ALL EXTERIOR WALL MATERIALS THAT ARE NOT NOTED AS STUCCO OR MASONRY SHALL BE CONSTRUCTED USING FIBER-CEMENT BOARD PER STYLES INDICATED ON THE EXTERIOR ELEVATION DRAWINGS. CONTRACTOR SHALL FOLLOW THE MANUFACTURER'S APPROVED METHODS AND MATERIALS WHICH CONFORM TO LOCAL AND APPLICABLE CODES.
33. WALLS NOTED AS STONE SHALL BE CULTURED STONE OVER MORTAR BED, GALVANIZED METAL LATH, 30 ASPHALT FELT UNDERLAYMENT, AND 7/16" OSB SHEATHING. CONTRACTOR SHALL FOLLOW THE MANUFACTURER'S APPROVED METHODS AND MATERIALS WHICH CONFORM TO LOCAL AND APPLICABLE CODES.
34. WALLS NOTED AS STUCCO SHALL BE A 3-COAT STUCCO FINISH OVER GALVANIZED METAL LATH, 30LB ASPHALT IMPREGNATED BUILDING PAPER OR EQUIVALENT, AND 7/16" OSB SHEATHING. CONTRACTOR SHALL FOLLOW THE MANUFACTURER'S APPROVED METHODS AND MATERIALS WHICH CONFORM TO LOCAL AND APPLICABLE CODES
35. REPAIR ALL CRACKS, HOLES, AND OTHER PENETRATIONS OR DAMAGES AREAS IN THE EXTERIOR SHEATHING WITH SHEATHING TAPE OR OTHER ACCEPTABLE METHODS PER CODE IMMEDIATELY PRIOR TO PLACING ANY EXTERIOR SIDING OR FINISHES. INSTALL SPECIFIED SIDING OR FINISHED IN STRICT CONFORMANCE WITH MANUFACTURER'S RECOMMENDED INSTALLATION INSTRUCTIONS.
36. PROVIDE WATERPROOF CAULKING UNIFORMLY WHERE ANY SIDING MEETS TRIMWORK, FLASHING, WINDOWS, OR DOORS.

GENERAL EGRESS AND LIFE SAFETY NOTES:

37. PER SECTION R310.1 EMERGENCY ESCAPE AND RESCUE OPENINGS IRC 2012:

37.1. ALL EMERGENCY ESCAPE AND RESCUE WINDOW OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET
37.2. THE MINIMUM NET CLEAR OPENING WINDOW HEIGHT SHALL BE 24 INCHES.
37.3. THE MINIMUM NET CLEAR WINDOW OPENING WIDTH SHALL BE 20 INCHES.
37.4. EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL BE OPERATIONAL FROM THE INSIDE OF THE ROOM WITHOUT THE USE OF KEYS, TOOLS OR SPECIAL KNOWLEDGE.
37.5. THE MINIMUM HORIZONTAL AREA OF THE WINDOW WELL SHALL BE 9 SQUARE FEET WITH A MINIMUM HORIZONTAL PROJECTION AND WIDTH OF 36 INCHES. THE AREA OF THE WINDOW WELL SHALL ALLOW THE EMERGENCY ESCAPE AND RESCUE OPENING TO BE FULLY OPENED.
37.6. WINDOW WELLS WITH A VERTICAL DEPTH GREATER THAN 44 INCHES SHALL BE EQUIPPED WITH A PERMANENTLY AFFIXED LADDER OR STEPS USABLE WITH THE WINDOW IN THE FULLY OPEN POSITION. LADDERS OR STEPS REQUIRED BY THIS SECTION SHALL NOT BE REQUIRED TO COMPLY WITH SECTIONS R311.7 AND R311.8. LADDERS OR RUNGS SHALL HAVE AN INSIDE WIDTH OF AT LEAST 12 INCHES SHALL PROJECT AT LEAST 3 INCHES FROM THE WALL AND SHALL BE SPACED NOT MORE THAN 18 INCHES ON CENTER VERTICALLY FOR THE FULL HEIGHT OF THE WINDOW WELL.
37.7. A DRAINAGE SYSTEM FOR WINDOW WELLS IS NOT REQUIRED WHEN THE FOUNDATION IS ON WELL-DRAINED SOIL OR SAND-GRAVEL MIXTURE SOILS ACCORDING TO THE UNITED SOIL CLASSIFICATION SYSTEM, GROUP I SOILS, AS DETAILED IN TABLE R405.1.
37.8. BARS, GRILLES, COVERS, SCREENS OR SIMILAR DEVICES ARE PERMITTED TO BE PLACED OVER EMERGENCY ESCAPE AND RESCUE OPENINGS, BULKHEAD ENCLOSURES, OR WINDOW WELLS THAT SERVE SUCH OPENINGS, PROVIDED THE MINIMUM NET CLEAR OPENING SIZE COMPLIES WITH SECTIONS R310.1.1 TO R310.1.3, AND SUCH DEVICES SHALL BE RELEASABLE OR REMOVABLE FROM THE INSIDE WITHOUT THE USE OF A KEY, TOOL, SPECIAL KNOWLEDGE OR FORCE GREATER THAN THAT WHICH IS REQUIRED FOR NORMAL OPERATION OF THE ESCAPE AND RESCUE OPENING.
37.9. EMERGENCY ESCAPE WINDOWS ARE ALLOWED TO BE INSTALLED UNDER DECKS AND PORCHES PROVIDED THE LOCATION OF THE DECK ALLOWS THE EMERGENCY ESCAPE WINDOW TO BE FULLY OPENED AND PROVIDES A PATH NOT LESS THAN 36 INCHES IN HEIGHT TO A YARD OR COURT.

38. ALL HALLWAY WIDTHS SHALL BE A MINIMUM OF 36" CLEAR WHEN FINISHED.
39. PROVIDE FIRE EXTINGUISHERS IN TYPE, SIZE, QUAINTLY, AND LOCATIONS AS REQUIRED BY THE BUILDING AND FIRE DEPARTMENTS.
40. ALL BEDROOMS SHALL BE PROVIDED WITH SMOKE DETECTORS DIRECTLY INSIDE AND OUTSIDE OF DOOR TO ROOMS. SMOKE DETECTORS SHALL ALSO BE INSTALLED AT THE TOP AND BOTTOM OF EACH INTERIOR STAIR RUN AS WELL AS AT EACH EXTERIOR EGRESS DOOR.
41. THE GARAGE SHALL BE SEPARATED AS REQUIRED BY IRC 2012 TABLE R302.6. OPENINGS IN GARAGE WALLS SHALL COMPLY WITH SECTION R302.5. THIS PROVISION DOES NOT APPLY TO GARAGE WALLS THAT ARE PERPENDICULAR TO THE ADJACENT DWELLING UNIT WALL.

GENERAL STAIR NOTES:

42. STAIRS SHALL BE CONSTRUCTED SO THEY ADHERE TO IRC 2012 SECTION 311.7
42.1. 7-3/4" RISER HEIGHTS MAXIMUM (RISERS ARE NOT TO VARY MORE THAN 3/8" IN THE SAME STAIR RUN)
42.2. 10" TREADS MINIMUM.
42.3. PROVIDE A CLEAR FINISHED WIDTH OF 36"
42.4. HEADROOM SHALL BE NOT LESS THAN 6'-8" AND CLEAR OF ALL OBSTRUCTIONS.
42.5. HEIGHT OF TOP OF HANDRAILS SHALL BE BETWEEN 34" AND 38".
42.6. HANDRAILS WITH A CIRCULAR CROSS SECTION SHALL HAVE AN OUTSIDE DIAMETER OF AT LEAST 1 1/4 INCHES AND NOT GREATER THAN 2 INCHES. IF THE HANDRAIL IS NOT CIRCULAR, IT SHALL HAVE A PERIMETER DIMENSION OF AT LEAST 4 INCHES AND NOT GREATER THAN 6 1/4 INCHES WITH A MAXIMUM CROSS SECTION OF DIMENSION OF 2 1/4 INCHES. EDGES SHALL HAVE A MINIMUM RADIUS OF 0.01 INCH.
42.7. HANDRAILS WITH A PERIMETER GREATER THAN 6 1/4 INCHES SHALL HAVE A GRASPABLE FINGER RECESS AREA ON BOTH SIDES OF THE PROFILE. THE FINGER RECESS SHALL BEGIN WITHIN A DISTANCE OF 3/4 INCH (19 MM) MEASURED VERTICALLY FROM THE TALLEST PORTION OF THE PROFILE AND ACHIEVE A DEPTH OF AT LEAST 5/16 INCH WITHIN 7/8 INCH BELOW THE WIDEST PORTION OF THE PROFILE. THIS REQUIRED DEPTH SHALL CONTINUE FOR AT LEAST 3/8 INCH TO A LEVEL THAT IS NOT LESS THAN 1 3/4 INCHES BELOW THE TALLEST PORTION OF THE PROFILE. THE MINIMUM WIDTH OF THE HANDRAIL ABOVE THE RECESS SHALL BE 1 1/4 INCHES TO A MAXIMUM OF 2 3/4 INCHES. EDGES SHALL HAVE A MINIMUM RADIUS OF 0.01 INCH.
42.8. HANDRAILS FOR STAIRWAYS SHALL BE CONTINUOUS FOR THE FULL LENGTH OF THE FLIGHT, FROM A POINT DIRECTLY ABOVE THE TOP RISER OF THE FLIGHT TO A POINT DIRECTLY ABOVE THE LOWEST RISER OF THE FLIGHT. HANDRAIL ENDS SHALL BE RETURNED OR SHALL TERMINATE IN NEWEL POSTS OR SAFETY TERMINALS. HANDRAILS ADJACENT TO A WALL SHALL HAVE A SPACE OF NOT LESS THAN 11/2 INCH BETWEEN THE WALL AND THE HANDRAILS.
42.9. GUARDRAILS SHALL BE CONSTRUCTED BETWEEN 35" AND 38" ABOVE FINISHED FLOOR TO TOP OF RAIL. BALUSTERS AND PICKETS SHALL HAVE A MAXIMUM OPENING OF 4".
43. STAIRS WITH ENCLOSED USABLE SPACE UNDERNEATH SHALL BE 1 HOUR FIRE PROTECTED BY CONSTRUCTING THE WALLS AND THE UNDERSIDE OF THE STAIRS OF THE ENCLOSURE WITH 5/8" TYPE "X" GYPSUM BOARD.
44. EXTERIOR STAIRS SHALL HAVE THE FOLLOWING STRINGER ARRANGEMENT: [6] 2x12 STRINGERS @ STAIR. DOUBLE STINGER @ SIDES WITH 2 INTERMEDIATE STRINGERS. UNLESS NOTED OTHERWISE (U.N.O.).
45. INTERIOR STAIRS SHALL HAVE THE FOLLOWING STRINGER ARRANGEMENT: [3] 2x12 STRINGERS @ STAIR. SINGLE STINGER @ SIDES WITH 1 INTERMEDIATE STRINGER.UNLESS NOTED OTHERWISE (U.N.O.).

GENERAL DOOR AND WINDOW NOTES:

46. PER IRC 2012 R302.5.1 OPENING PROTECTION - OPENINGS FROM A PRIVATE GARAGE DIRECTLY INTO A ROOM USED FOR SLEEPING PURPOSES SHALL NOT BE PERMITTED. OTHER OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOORS NOT LESS THAN 1 3/8 INCHES IN THICKNESS, SOLID OR HONEYCOMB-CORE STEEL DOORS NOT LESS THAN 1 3/8 INCHES THICK, OR 20-MINUTE FIRE-RATED DOORS, EQUIPPED WITH A SELF-CLOSING DEVICE.
47. PROVIDE TEMPERED GLASS WHEN THE FOLLOWING OCCURS:
47.1. WITHIN 24" ARC OF DOORS OR OTHER AREAS SUBJECT TO HUMAN IMPACT.
47.2. USED AS INGRESS OR EGRESS DOORS
47.3. PLACED LESS THAN 18" ABOVE FINISHED FLOOR
47.4. IN GLAZING ADJACENT TO THE LANDING AT THE BOTTOM OF A STAIRWAY WHERE THE GLAZING IS LESS THAN 36 INCHES ABOVE THE LANDING AND WITHIN 60 INCHES HORIZONTALLY OF THE BOTTOM TREAD
48. ALL DOOR OPENINGS IN FRAME CONSTRUCTION WHICH ARE NOT DIMENSIONED ARE EITHER CENTERED ON THE WALL OR LOCATED 4" FROM THE FACE OF STUD TO THE FINISHED JAMB ON THE HINGED SIDE.
49. COORDINATE ALL DOOR AND WINDOW HEADERS WITH CORRESPONDING WINDOW AND DOOR SCHEDULES.
50. INTERIOR DOOR AND ARCHED OPENINGS UP TO 6'-0" WIDE SHALL HAVE [2] 2x8 HEADERS.
51. THRESHOLDS SHALL BE ½" HIGH MAXIMUM
52. ALL GLAZING AND SAFETY GLAZING SHALL BE IN COMPLIANCE WITH 2012 IRC SECTION R308.

GENERAL INSULATION AND ENERGY NOTES:

53. **CHAPTER 11 ENERGY AND EFFICIENCY: ENERGY COMPLIANCE NECESSARY FOR CLIMATE ZONE 5 PER 2012 IECC**

FENESTRATION U-FACTOR	0.32
CEILINGS	R-49
WALLS	R-20
BASEMENT WALLS	R-15
CRAWL SPACE WALLS	R-15
SKYLIGHT U-FACTOR	0.55
GLAZED FENESTRATION SHGC	NR

NOTE IN-LIEU OF MINIMUM REQUIREMENTS OWNER HAS ELECTED TO HERS RATING. REFER TO HERS REPORT AND WALLS SECTIONS FOR INSULATION AND ENVELOPE PRESCRIPTIONS TO BE IMPLEMENTED IN THIS HOUSE.

54. INSULATE BEHIND BATHTUBS, SHOWERS, PARTITIONS, AND EXTERIOR CALIFORNIA STYLE FRAMING CORNERS. PROVIDE FACE STAPLED BATTS OR FRICTION FIT BATTS. PROVIDE R-10 INSULATION UNDER ELECTRIC WATER HEATERS.
55. N/A
56. A GROUND COVER OF 6 MIL BLACK POLYETHYLENE OR EQUIVALENT SHALL BE LAID OVER THE GROUND IN ALL CRAWL SPACES. THE GROUND COVER SHALL BE OVERLAPPED 12" AT EACH JOINT AND TAPED AND SEALED WITH SILICONE AND SHALL EXTEND TO THE FOUNDATION WALL. ADHERE TO FOOTING ADJACENT TO THE WALL WITH A CONTINUOUS SILICONE BEAD.
57. THE NET FREE VENTILATING AREA FOR ATTIC VENTILATION MAY BE 1/300 OF THE AREA OF THE VENTILATED SPACE PROVIDED THAT A VAPOR BARRIER HAVE A PERM RATING NOT EXCEEDING 1 IS INSTALLED ON THE WARM SIDE OF THE INSULATION.

GENERAL VENTILATION NOTES:

58. PROVIDE EXTERIOR COMBUSTION AIR TO GAS, WOOD, AND FOSSIL-FIRE HEATED EQUIPMENT
59. PROVIDE COMBUSTIBLE AIR TO FURNACE AND WATER HEATER PER LOCAL BUILDING CODES
60. LP GAS BURNING APPLIANCES ARE NOT PERMITTED IN CRAWL SPACES.
61. PROVIDE AT LEAST 100 SQUARE INCHES OF VENTILATION FOR LAUNDRY ROOMS.
62. PROVIDE EXTERIOR VENTING OF CLOTHES DRYER, EXHAUST FANS, AND COOLING AND HEATING EQUIPMENT.
63. PROVIDE 1 SQUARE FOOT PER EVERY 150 SQUARE FOOT (WALL VENT TO ATTIC SPACE) OR 1 SQUARE FOOT PER EVERY 300 SQUARE FOOT IF ROOF EAVE/SOFFIT VENTS ARE USED WITH 1" SPACE BETWEEN ATTIC INSULATION AND ROOF SHEATHING.
64. DUCTWORK SHALL COMPLY WITH 2012 IRC CHAPTER 16.
65. GAS BURNING APPLIANCE SHALL COMPLY WITH 2012 IRC CHAPTERS 17 AND 24.
66. CHIMNEYS & VENTS SHALL COMPLY WITH 2012 IRC CHAPTER 18.
67. ROOF VENTING SHALL COMPLY WITH 2012 IRC SECTION R806.

GENERAL FIREPLACE NOTES:

68. FIREPLACES AND CHIMNEYS SHALL COMPLY WITH REQUIREMENTS OF 2012 IRC CHAPTER 10.
69. PRE-FABRICATED FIREPLACES, CHIMNEYS, AND RELATED COMPONENTS TO BEAR U.L. OR I.C.B.O. SEAL OF APPROVAL AND TO BE INSTALLED PER MANUFACTURERS SPECIFICATIONS.
70. HEARTHS SHALL EXTEND 20" MIMIMUM IN FRONT OF AND 12" MINIMUM BEYOND EACH SIDE OF FIREPLACE OPENINGS. FIREPLACES SHALL BE PROVIDED WITH TIGHTLY FITTING GLASS OR METAL DOORS.
71. ALL MASONRY FIREPLACES AND CHIMNEYS SHALL BE CONSTRUCTED TO CONFORM TO ALL APPLICABLE PORTIONS OF THE 2012 IRC CODE. FLUE LINER MINIMUM OF 5/8" FIRE CLAYS OR EQUIVALENT PER 2012 IRC. FLUE AREA PER 2012 IRC. CHIMNEYS SHALL SUPPORT ONLY THEIR OWN WEIGHT UNLESS SPECIFICALLY DESIGNED TO SUPPORT ADDITIONAL LOADS. ALL FIREPLACES SHALL BE PROVIDED WITH TIGHTLY FITTING FLUE DAMPERS, OPERATED WITH A READILY ACCESSIBLE MANUAL OR APPROVED AUTOMATIC CONTROL, AND AN OUTSIDE SOURCE OF COMBUSTION AIR. MINIMUM DUCT SIZE OF 6 SQUARE INCHES IN AREA PROVIDED WITH READILY ACCESSIBLE DAMPER LOCATED IN THE FRONT PART OF THE FIREBOX.

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FRONT RANGE COMMUNITY COLLEGE

GENERAL ARCHITECTURAL NOTES -
2012 IRC
12" = 1'-0"

5/4/2021 8:14:35 PM

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FRONT RANGE COMMUNITY COLLEGE

1 SITE PLAN
1" = 30'-0"

North

30' 15' 0' 30' 60'

SCALE : 1" = 30'-0"

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FRONT RANGE COMMUNITY COLLEGE

A1
SITE PLAN

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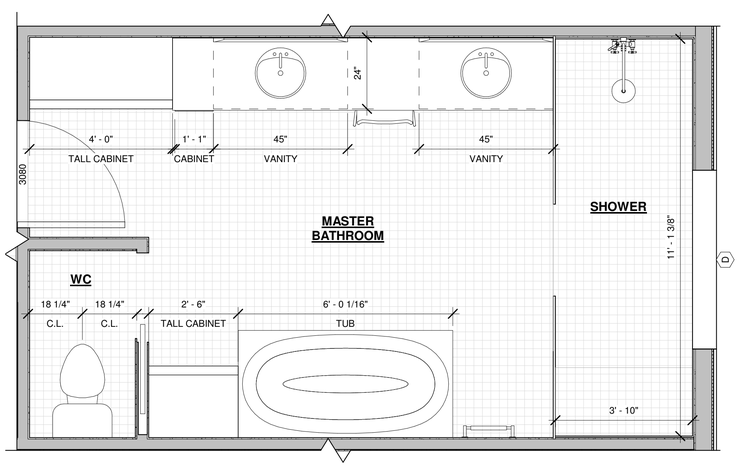
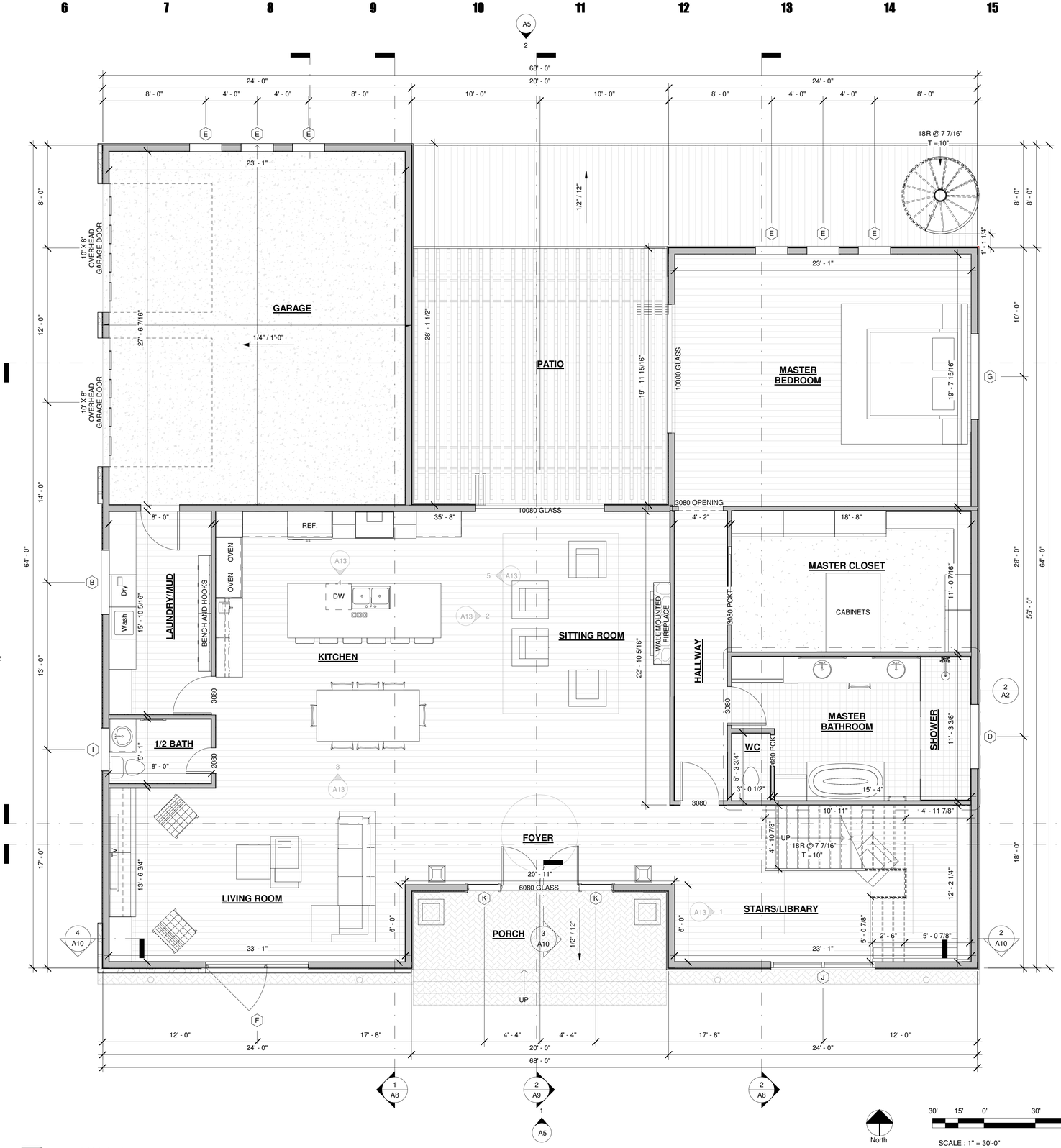
FRONT RANGE COMMUNITY COLLEGE

MAIN FLOOR WINDOW SCHEDULE							
TYPE MARK	Count	TYPE	WIDTH	HEIGHT	SILL HEIGHT	HEAD HEIGHT	COMMENTS
B	1	Casement 60" x 60"	5' - 0"	5' - 0"	3' - 0"	8' - 0"	
D	1	Casement 60" x 20" dark	5' - 0"	1' - 8"	4' - 6"	6' - 2"	
E	6	Casement 30" x 80" dark	2' - 6"	6' - 8"	2' - 0"	8' - 8"	
F	1	8' x 8'	8' - 0"	8' - 0"	2' - 0"	10' - 0"	
G	1	Casement 80" x 30" dark	6' - 8"	2' - 6"	5' - 2"	7' - 8"	
I	1	Casement 40" x 20" dark	3' - 4"	1' - 8"	5' - 0"	6' - 8"	
Grand total: 11							

MAIN FLOOR DOOR SCHEDULE					
CONSTRUCTION TYPE	Count	TYPE	WIDTH	HEIGHT	COMMENTS
245	2	36" x 96" black and glass	2' - 6"	8' - 0"	
2080	1	24" x 96" black	2' - 0"	8' - 0"	
2680 PCKT	1	2680 Pocket	2' - 6"	8' - 0"	
3080	4		3' - 0"	8' - 0"	
3080 PCKT	1	3080 Pocket	3' - 0"	8' - 0"	
6080 GLASS	1	36" x 96" black and glass	3' - 0"	8' - 0"	
10080 GLASS	2	Door_SL-10_NanaWall	10' - 0"	8' - 0"	
Grand total: 12					



2 MAIN FLOOR PLAN - MASTER BATHROOM
1/2" = 1'-0"



1 MAIN FLOOR PLAN - NEW
1/4" = 1'-0"

North

SCALE : 1" = 30'-0"

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FRONT RANGE COMMUNITY COLLEGE

A2

MAIN FLOOR PLAN

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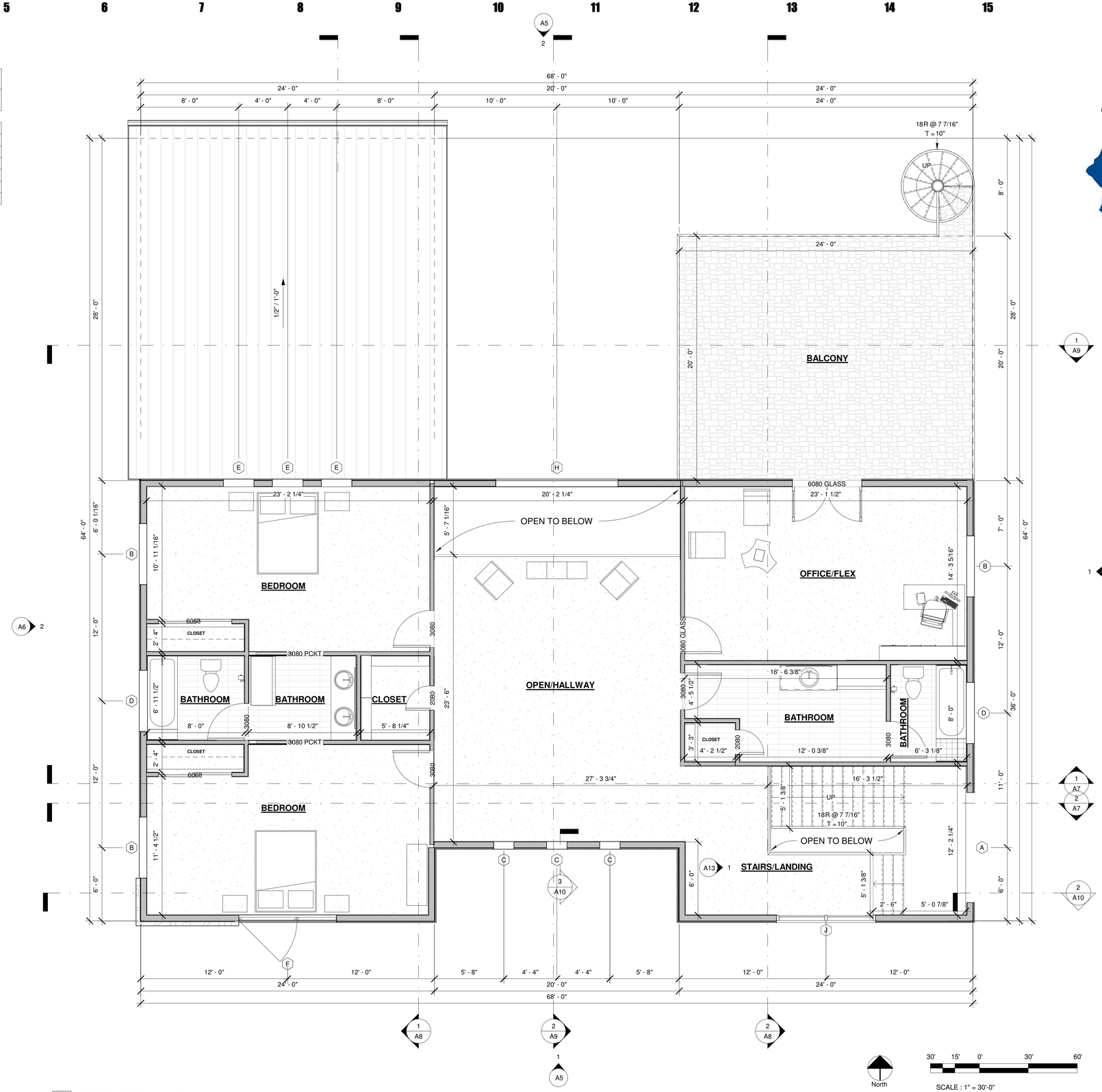
UPPER FLOOR WINDOW SCHEDULE						
TYPE MARK	TYPE	WIDTH	HEIGHT	SILL HEIGHT	HEAD HEIGHT	COMMENTS
A	Fixed 10' x 9'	9' - 0"	9' - 0"	-8"	8' - 4"	
B	Casement 60" x 60"	5' - 0"	5' - 0"	3' - 0"	8' - 0"	
C	Casement 20" x 60" dark	1' - 8"	5' - 0"	2' - 0"	7' - 0"	
D	Casement 60" x 20" dark	5' - 0"	1' - 8"			
E	Casement 30" x 80" dark	2' - 6"	6' - 8"	2' - 6"	9' - 2"	
F	8' x 8'	8' - 0"	8' - 0"	2' - 0"	10' - 0"	
H	Fixed 10' x 7'h	10' - 0"	7' - 0"	1' - 0"	8' - 0"	

Grand total: 14

UPPER FLOOR DOOR SCHEDULE					
CONSTRUCTION TYPE	Count	TYPE	WIDTH	HEIGHT	COMMENTS
2080	2	24" x 96" black	2' - 0"	8' - 0"	
3080	5	36" x 96" BLACK	3' - 0"	8' - 0"	
3080 GLASS	1	36" x 96" BLACK-GLASS	3' - 0"	8' - 0"	
3080 PCKT	2	3080 Pocket	3' - 0"	8' - 0"	
6068	2	72" x 80"	6' - 0"	8' - 0"	
6080 GLASS	1	68" x 96" BLACK	5' - 8"	8' - 0"	

Grand total: 13



1 UPPER FLOOR PLAN - NEW
1/4" = 1'-0"

North

SCALE : 1" = 30'-0"

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FRONT RANGE COMMUNITY COLLEGE

A3

UPPER FLOOR PLAN

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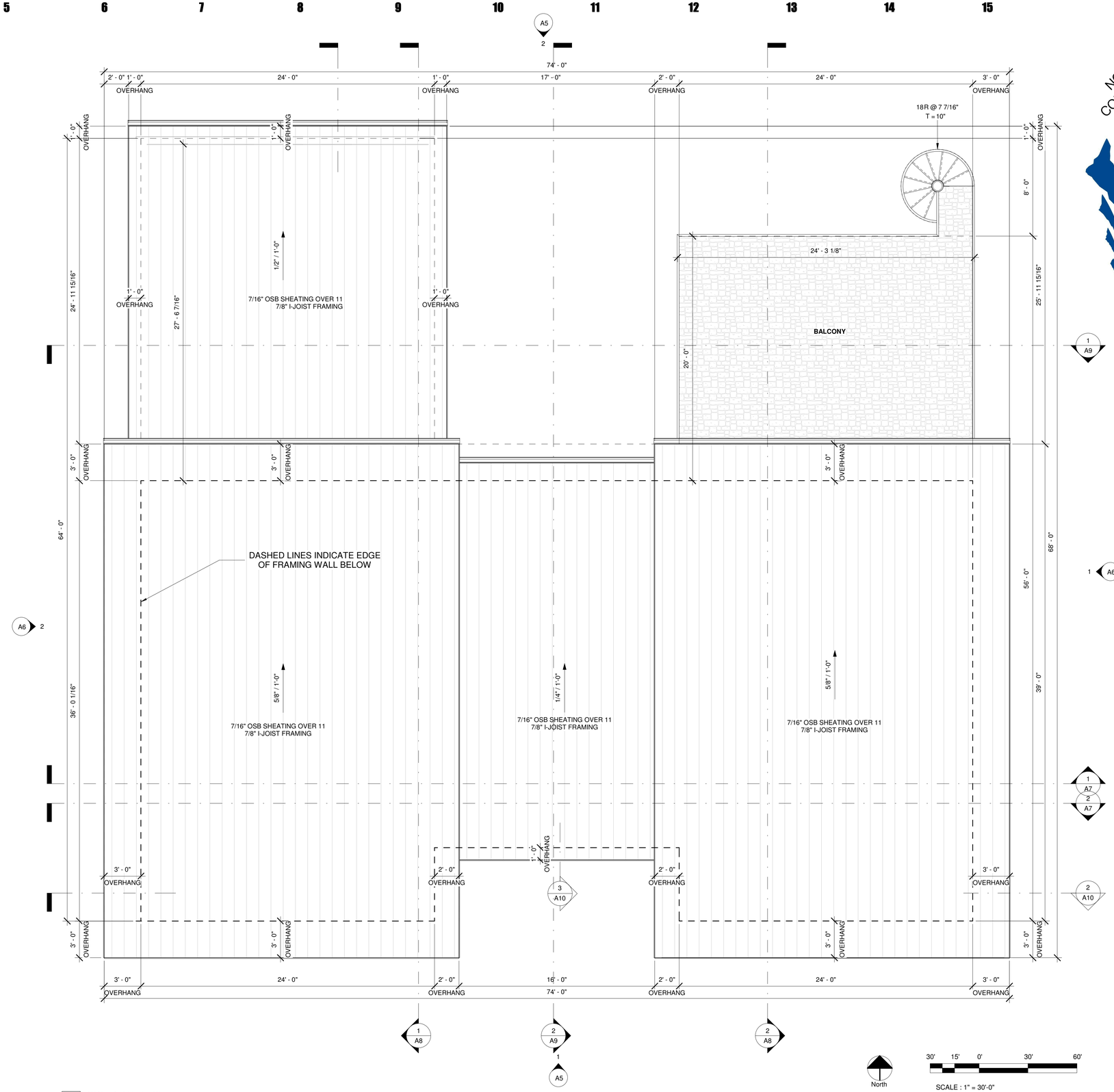

1 ROOF PLAN - NEW
1/4" = 1'-0"

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FRONT RANGE COMMUNITY COLLEGE

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FRONT RANGE COMMUNITY COLLEGE

A4
ROOF PLAN

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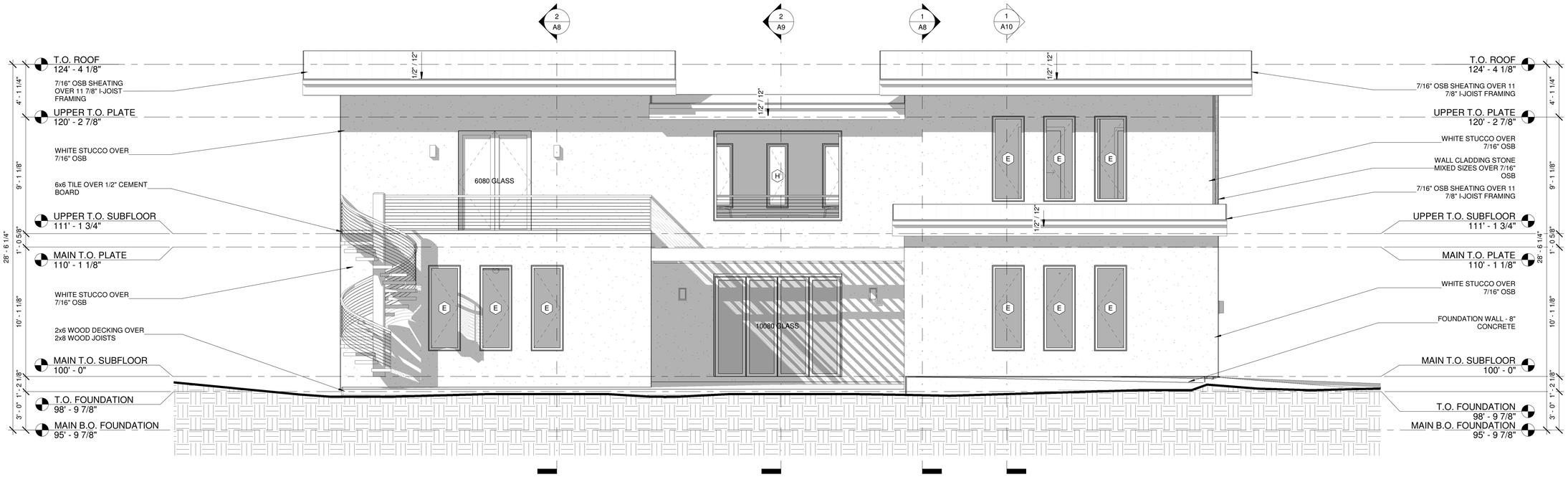
NOT FOR CONSTRUCTION

1 SOUTH ELEVATION
1/4" = 1'-0"



2 NORTH ELEVATION
1/4" = 1'-0"

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FRONT RANGE COMMUNITY COLLEGE

NORTH AND SOUTH ELEVATIONS

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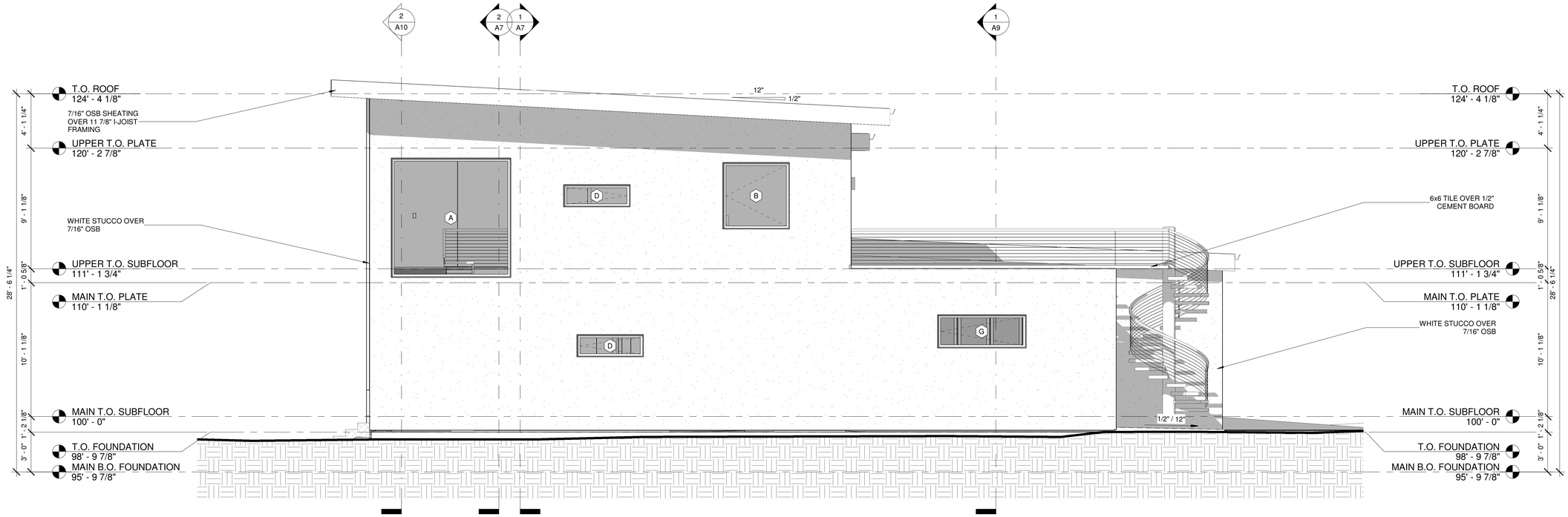
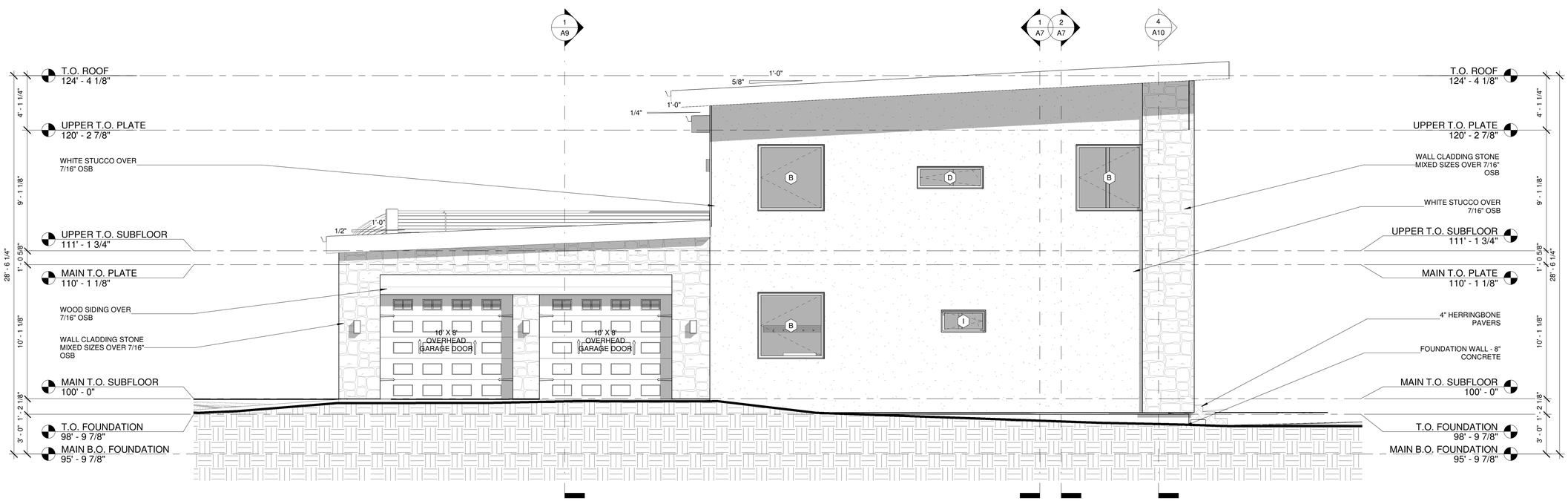


1 EAST ELEVATION
1/4" = 1'-0"



2 WEST ELEVATION
1/4" = 1'-0"

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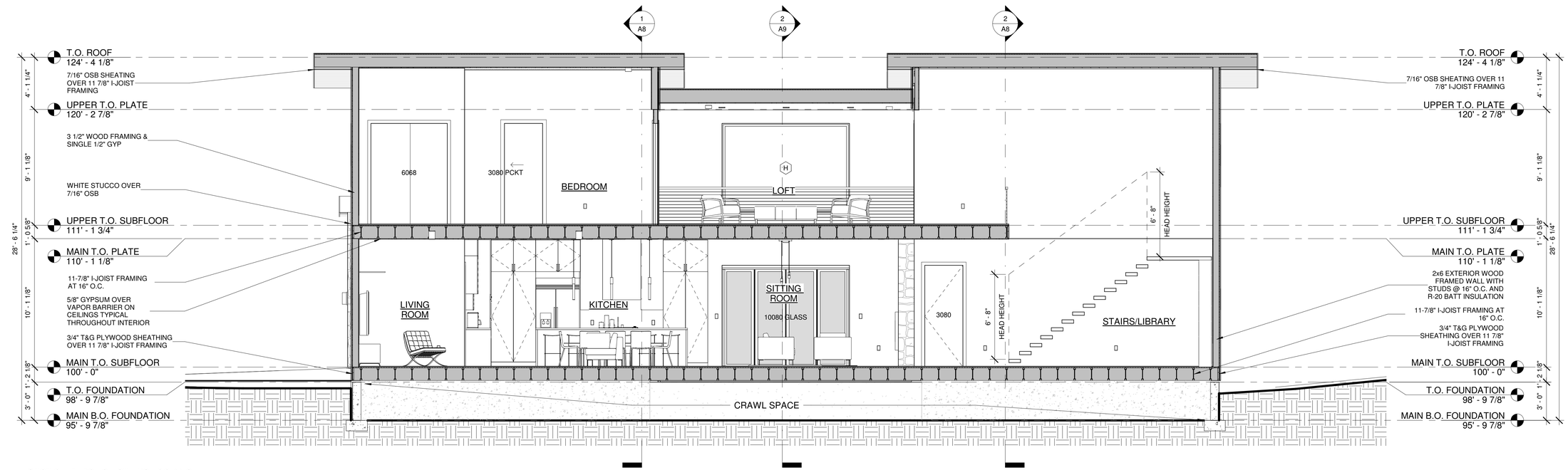
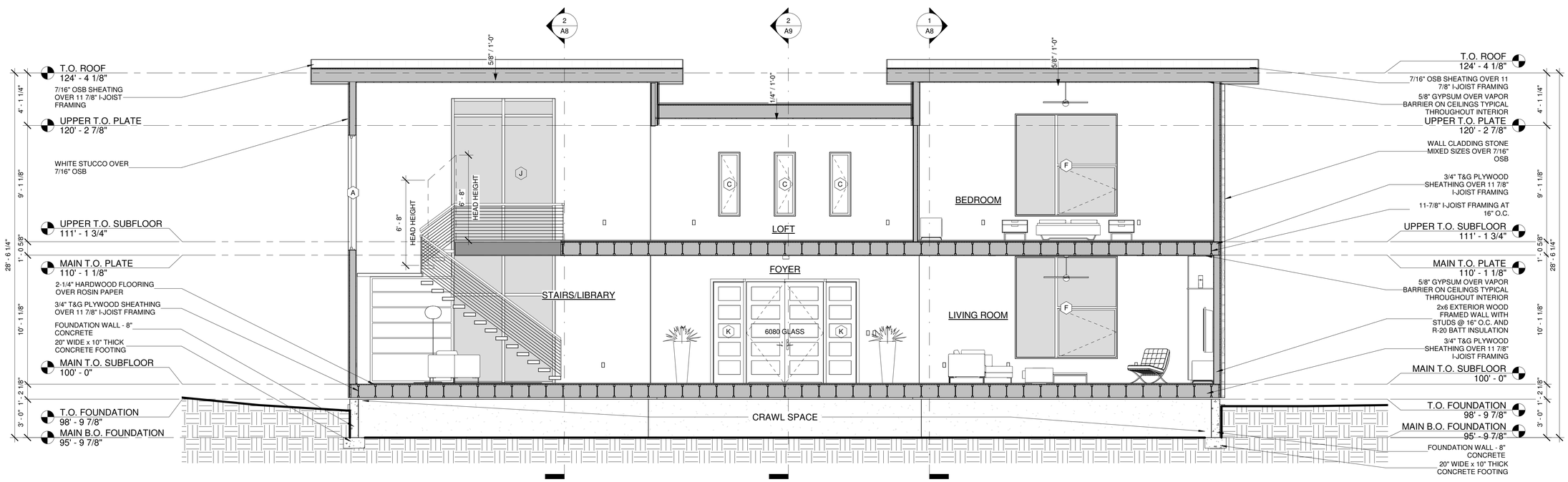


1 SECTION THROUGH STAIRS LOOKING NORTH
1/4" = 1'-0"



2 SECTION THROUGH STAIRS LOOKING SOUTH
1/4" = 1'-0"

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FRONT RANGE COMMUNITY COLLEGE

A7

BUILDING SECTIONS

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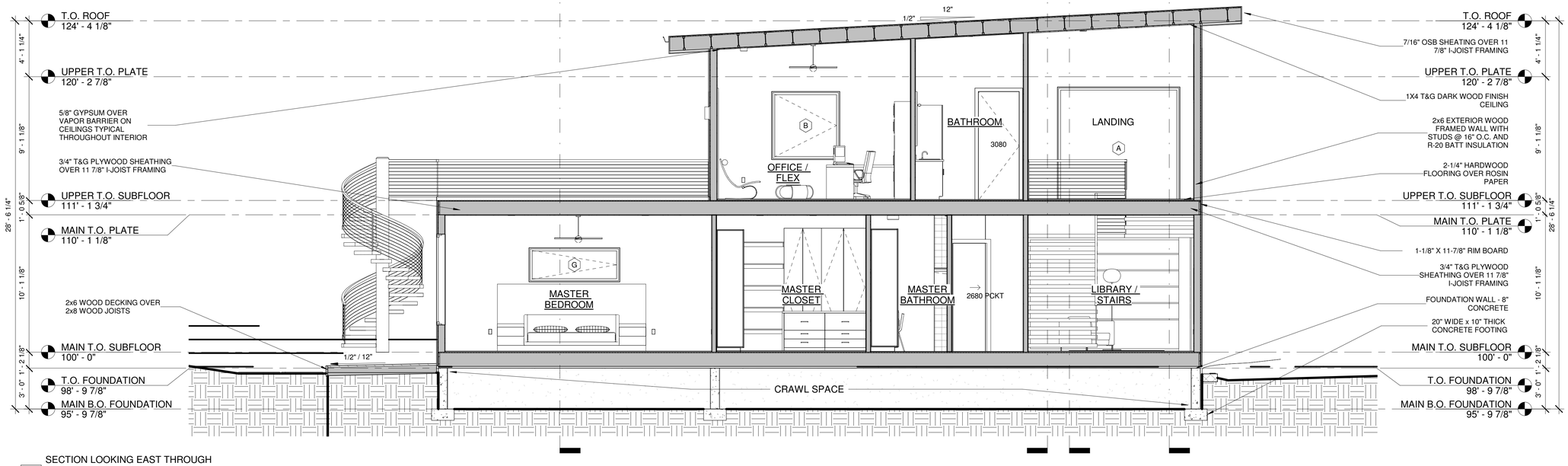
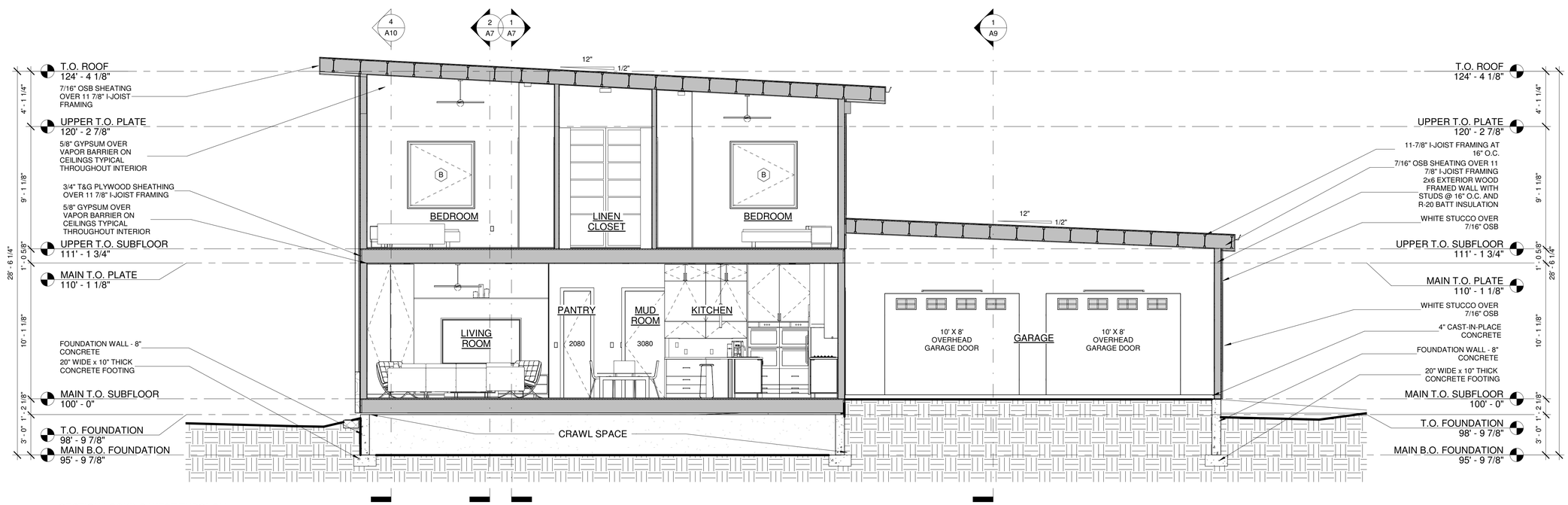


2 SECTION LOOKING EAST THROUGH MASTER SUITE AND STAIRS
1/4" = 1'-0"



1 SECTION LOOKING WEST THROUGH GARAGE, KITCHEN, LIVING ROOM
1/4" = 1'-0"

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A8

BUILDING SECTIONS

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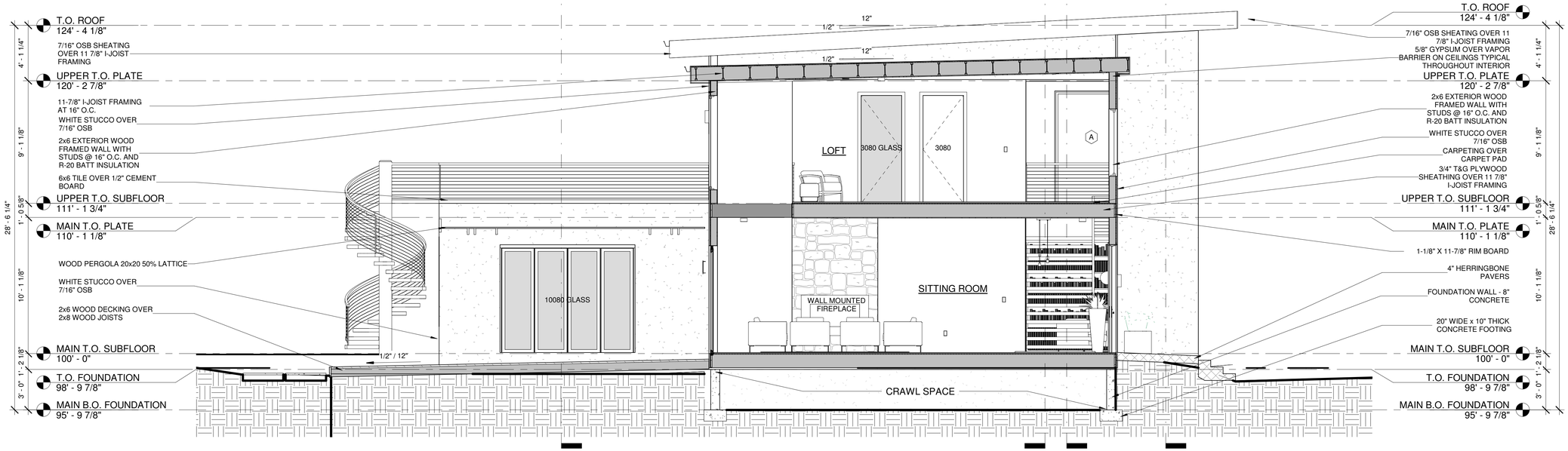
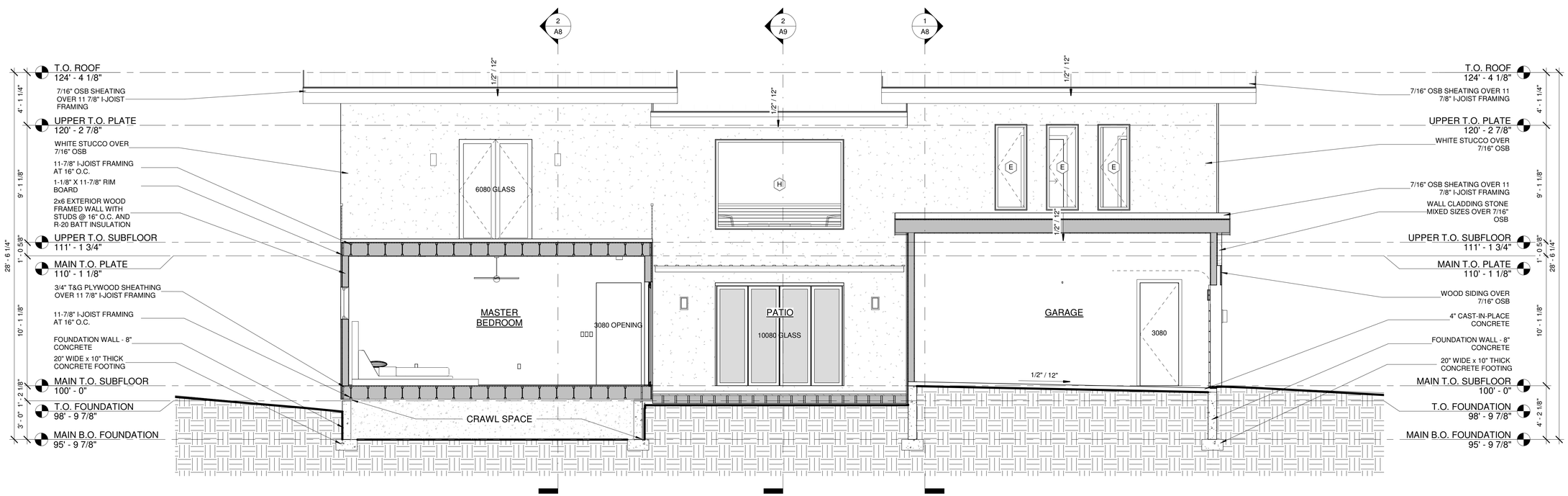


2 SECTION LOOKING EAST THROUGH MASTER SUITE AND STAIRS1
1/4" = 1'-0"



1 SECTION THROUGH GARAGE LOOKING NORTH
1/4" = 1'-0"

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A9

BUILDING SECTIONS

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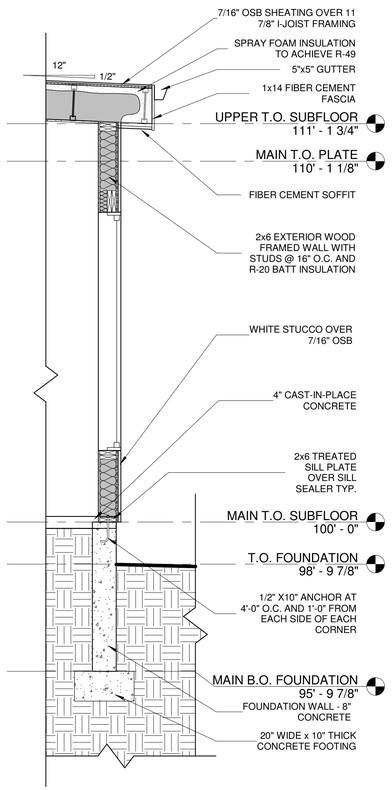
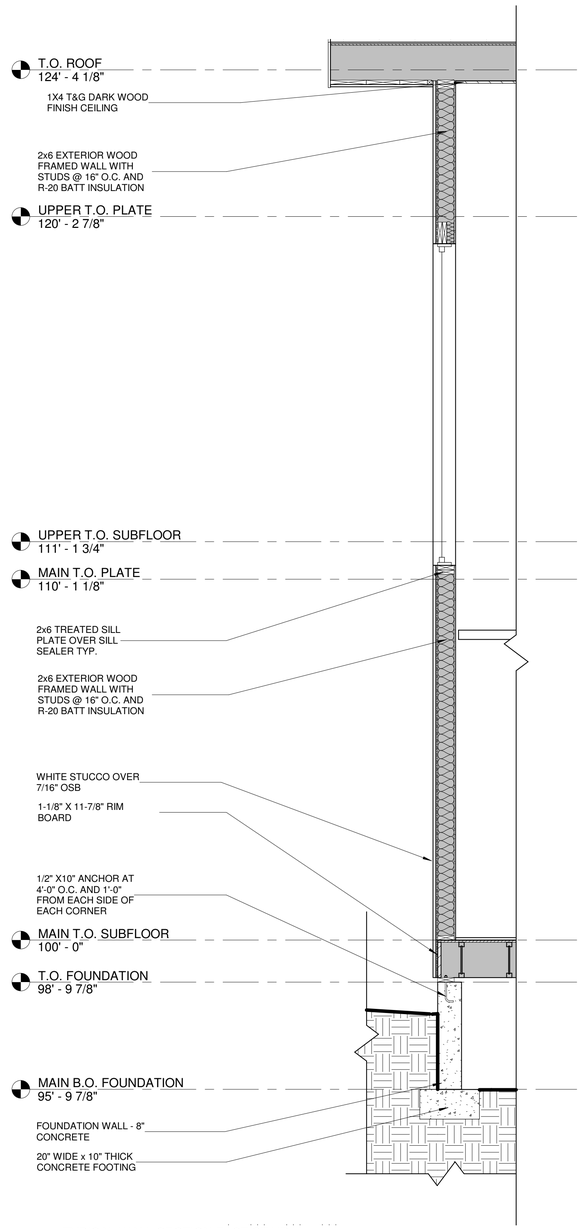
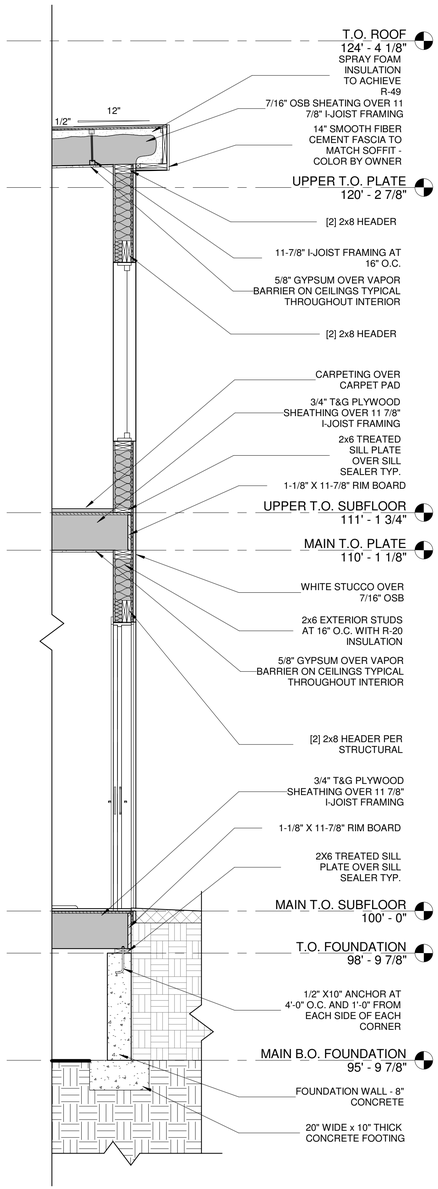


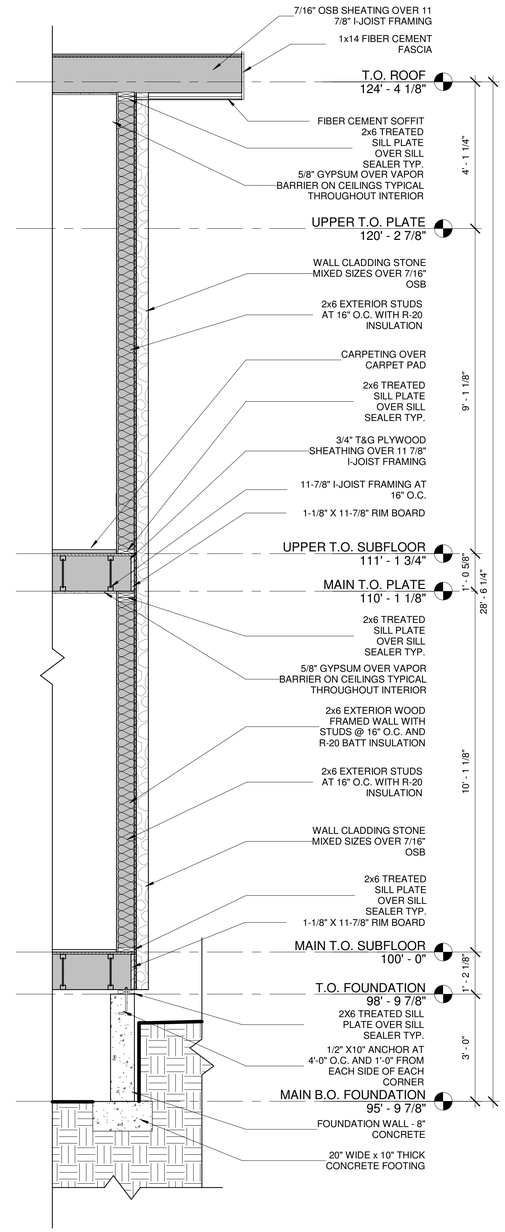
1 TYPICAL WALL SECTION NORTH GARAGE WALL
1/2" = 1'-0"



2 TYPICAL WALL SECTION EAST STAIR WALL
1/2" = 1'-0"



3 TYPICAL WALL SECTION SOUTH FRONT DOOR WALL
1/2" = 1'-0"



4 TYPICAL WALL SECTION WEST LIVING ROOM WALL
1/2" = 1'-0"

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FRONT RANGE COMMUNITY COLLEGE

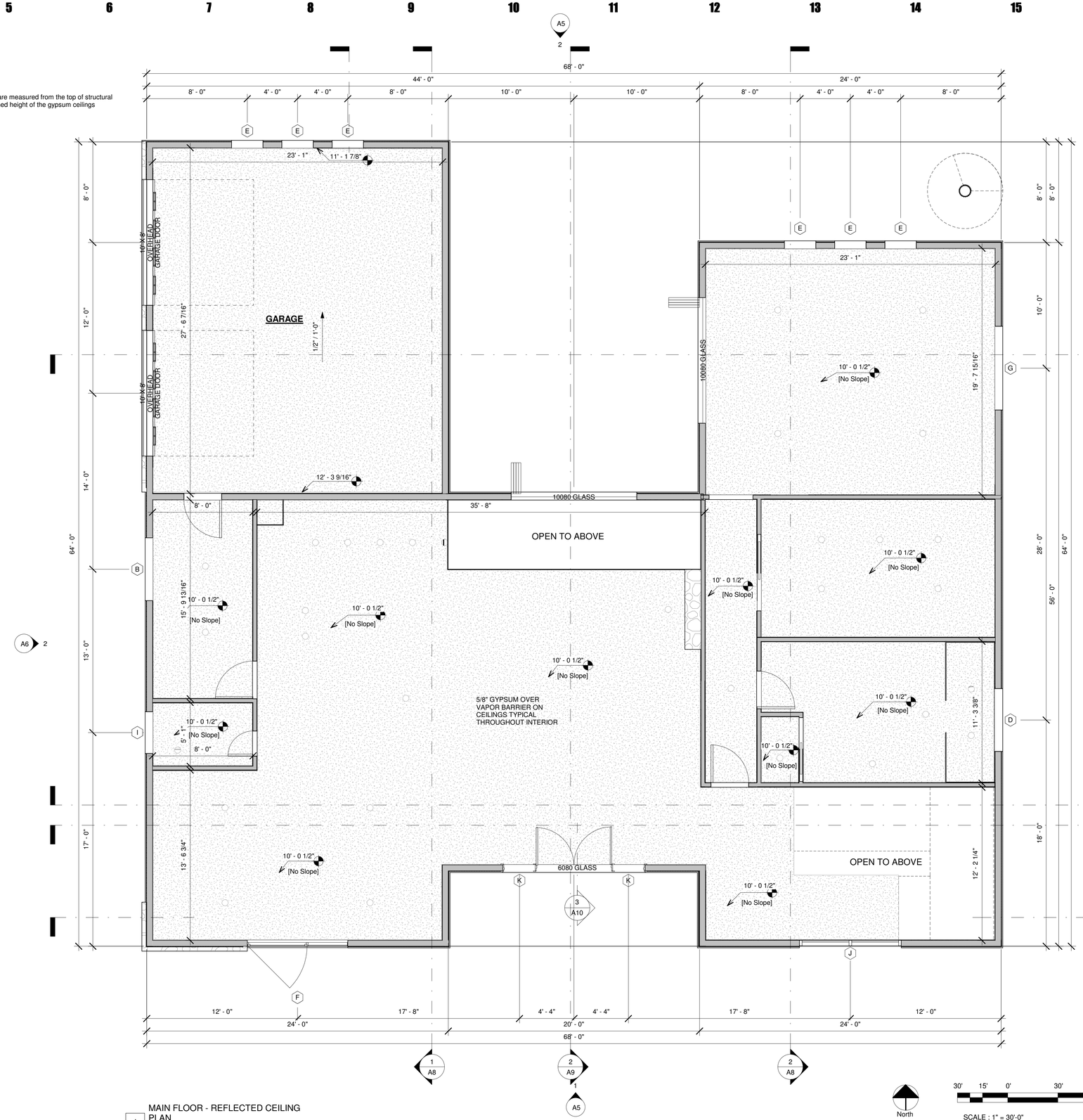
A10

WALL SECTIONS AND DETAILS

5/4/2021 8:15:00 PM

MAIN FLOOR CEILING MATERIAL TAKEOFF	
NAME	AREA
Ceiling - 5/8" Gypsum Wall Board	2402 SF

NOTE: All heights are measured from the top of structural subfloor to the finished height of the gypsum ceilings



1 MAIN FLOOR - REFLECTED CEILING PLAN
1/4" = 1'-0"

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FRONT RANGE COMMUNITY COLLEGE

SCALE : 1" = 30'-0"

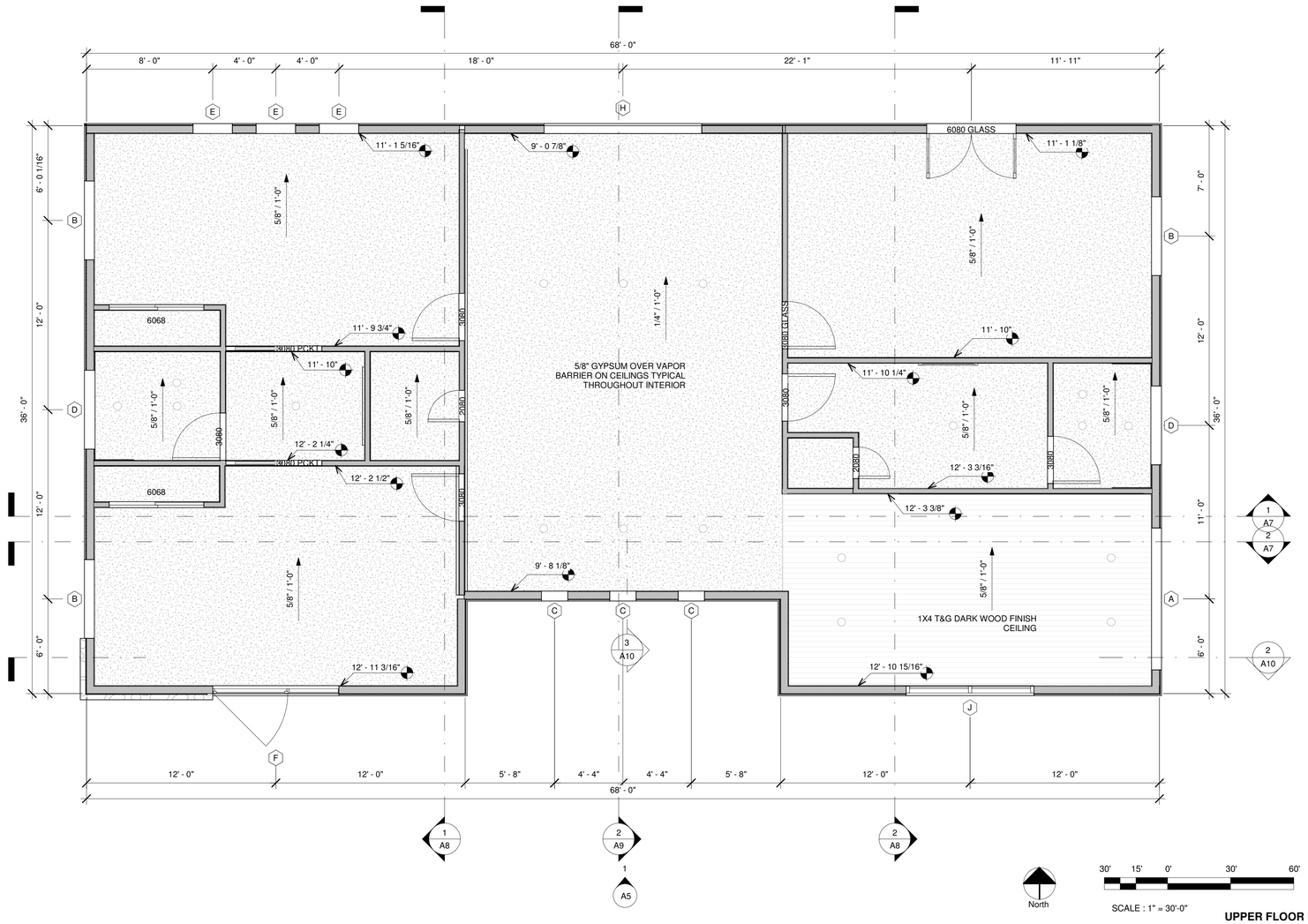
A11

MAIN FLOOR REFLECTED CEILING PLAN

5/4/2021 8:15:01 PM

UPPER FLOOR CEILING MATERIAL TAKEOFF	
NAME	AREA
Ceiling - 1x4 T&G Dark wood	285 SF
Ceiling - 5/8" Gypsum Wall Board	2563 SF

NOTE: All heights are measured from the top of structural subfloor to the finished height of the gypsum ceilings



1 UPPER FLOOR - REFLECTED CEILING PLAN
1/4" = 1'-0"

North

30' 15' 0' 30' 60'
SCALE : 1" = 30'-0"

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FRONT RANGE COMMUNITY COLLEGE

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FRONT RANGE COMMUNITY COLLEGE

A12
UPPER FLOOR REFLECTED CEILING PLAN

5/4/2021 8:15:02 PM

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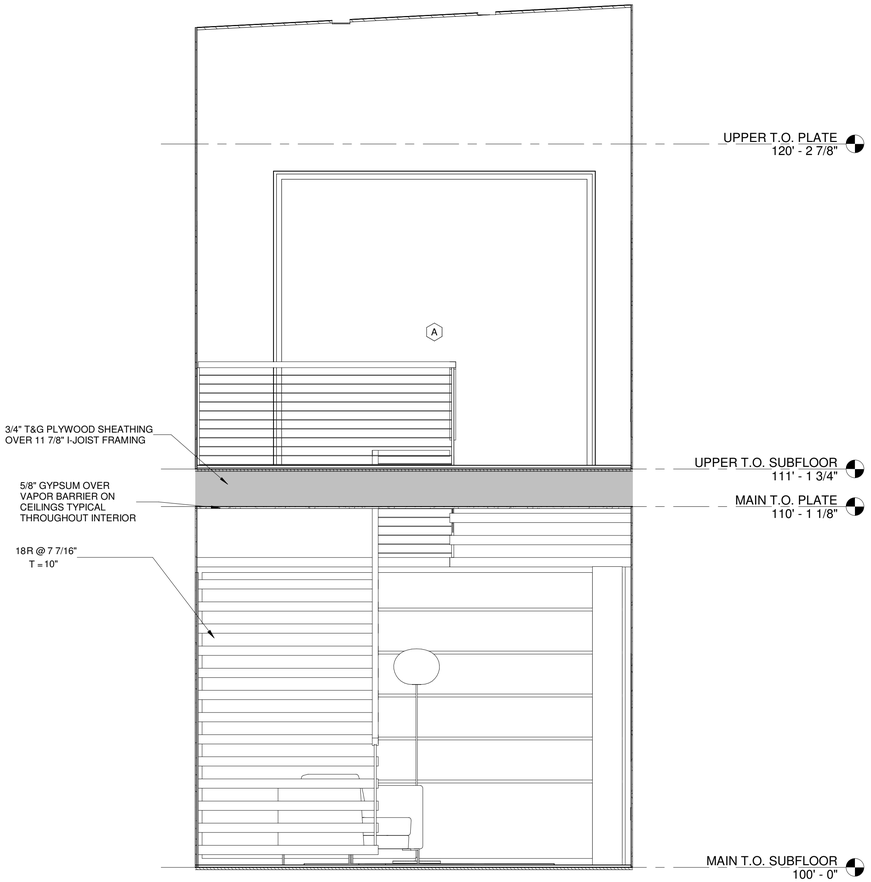
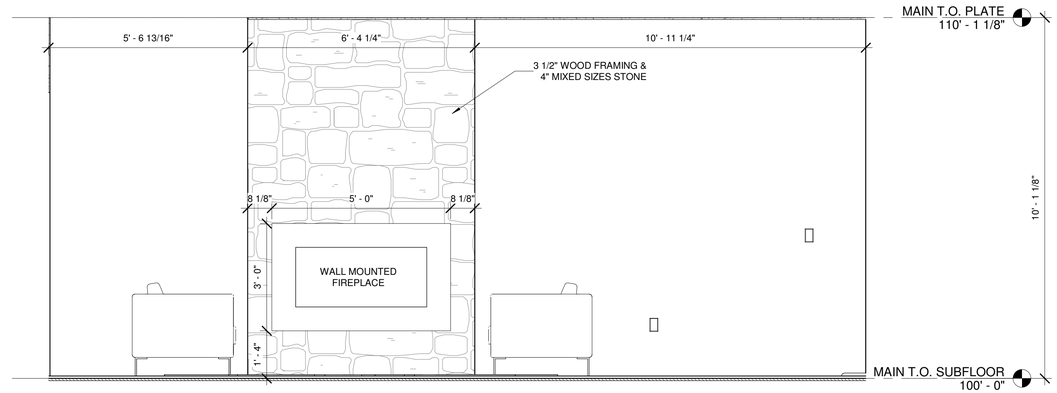
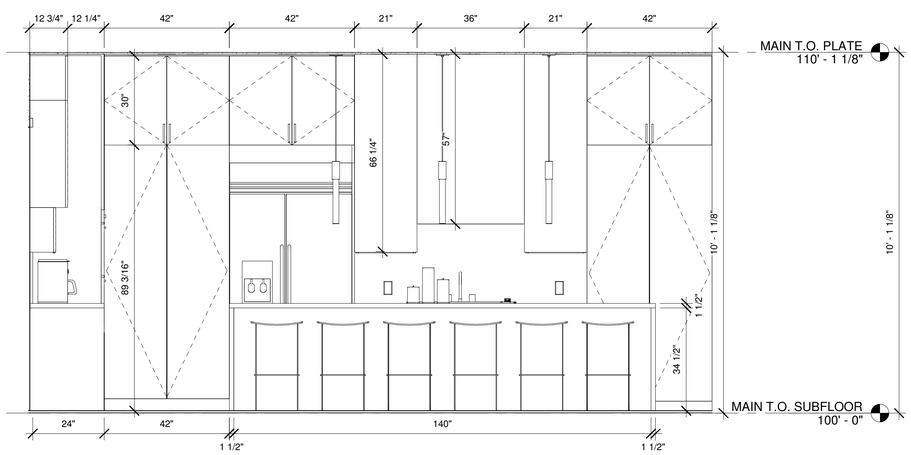


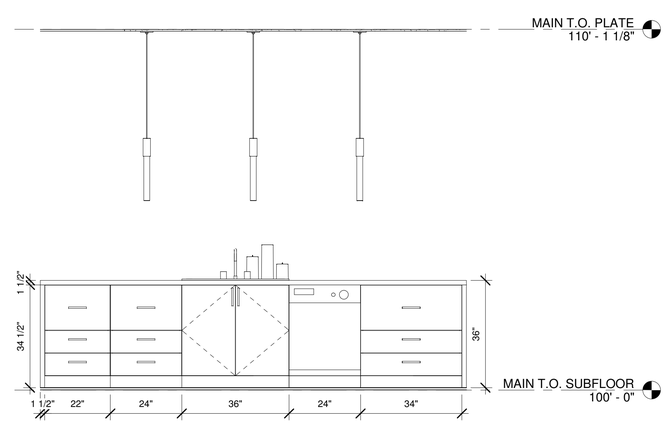
1 STAIRS
1/2" = 1'-0"



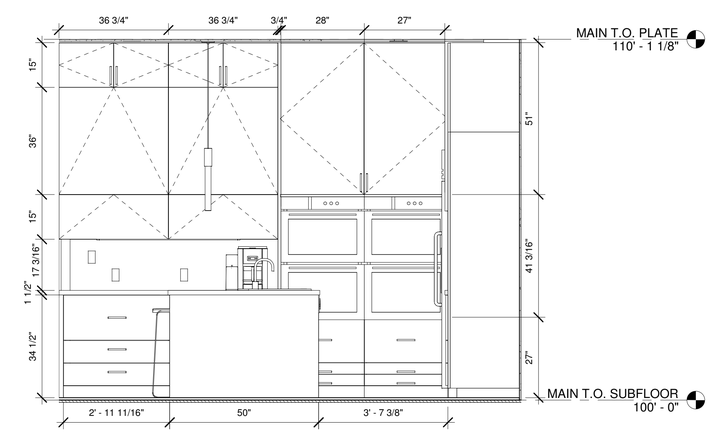
2 FIREPLACE ELEVATION
1/2" = 1'-0"



3 KITCHEN NORTH VIEW
1/2" = 1'-0"



4 KITCHEN SOUTH VIEW
1/2" = 1'-0"



5 KITCHEN WEST VIEW
1/2" = 1'-0"

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A13

DETAILS AND INTERIOR ELEVATIONS

5/4/2021 8:15:02 PM

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NOTE: All 3D view are conceptual only and are not intended to be used for construction purposes

FRONT RANGE COMMUNITY COLLEGE

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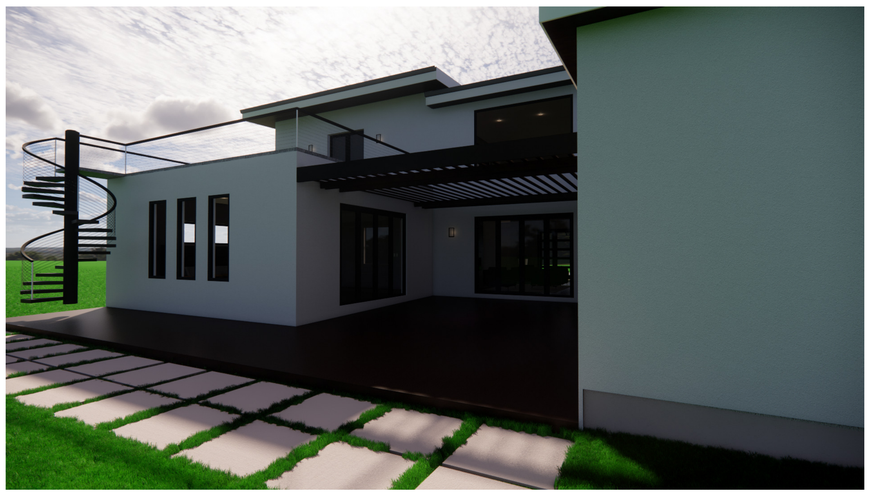
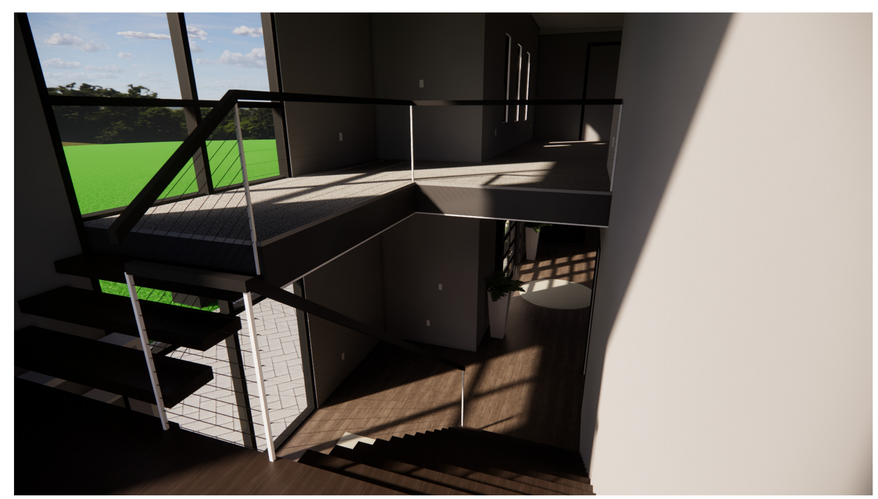
A14

EXTERIOR PERSPECTIVES

5/4/2021 8:15:03 PM

NOTE: All 3D view are conceptual only and are not intended to be used for construction purposes





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FRONT RANGE COMMUNITY COLLEGE

A15

INTERIOR PERSPECTIVES

5/4/2021 8:15:03 PM

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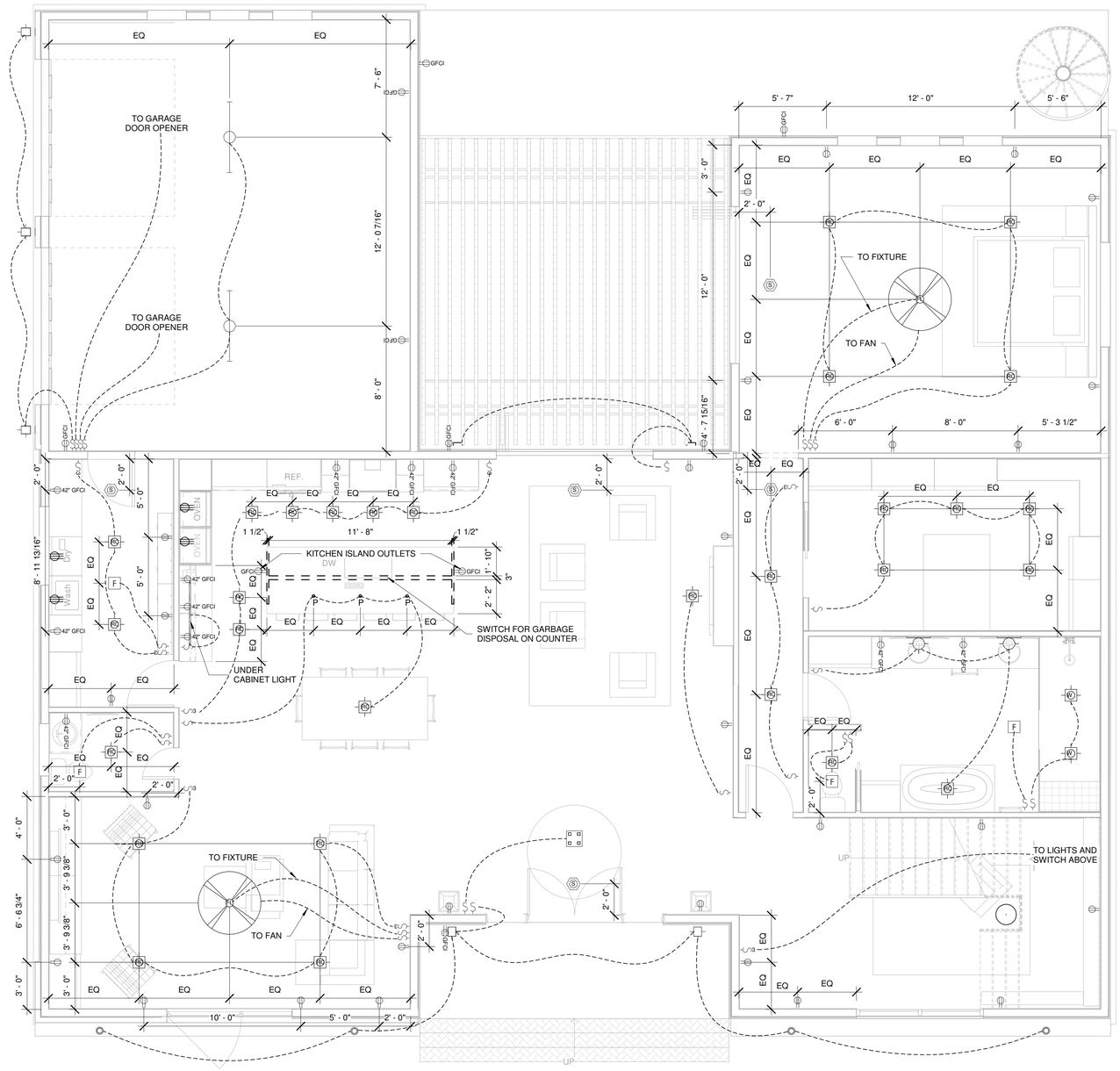
FRONT RANGE COMMUNITY COLLEGE

EXTERIOR WALL MOUNTED LIGHT
FLUORESCENT STRIP LIGHT
220V
IN-CEILING SPEAKER
HALF SWITCHED DUPLEX OUTLET
SINGLE SWITCH
WALL MOUNTED SCONCE
ELECTRICAL PANEL
FAN / LIGHT
BARE LIGHT
SMOKE ALARM
WET LOCATION ADJUSTABLE 6" RECESSED CAN
THREE WAY SWITCH
A/V CONNECTION
ALARM PANEL
SURFACE MOUNTED LIGHT
CEILING FAN W/ LIGHT
ADJUSTABLE 6" RECESSED CAN
GROUND FAULT CIRCUIT INTERRUPTER
FOUR WAY SWITCH
WALL MOUNTED READING LIGHT

ELECTRICAL LEGEND
1/2" = 1'-0"

MAIN FLOOR ELECTRICAL FIXTURE SCHEDULE		
FAMILY	TYPE	COUNT
Ceiling Fan - Modern	White 42"	2
Exhaust Fan - Ceiling	Exhaust Fan - Ceiling	4
Outlet-220 Single	Single	4
Outlet-Duplex		48
Smoke Detector	Smoke Detector	5
Switch-Single	Single	33

MAIN FLOOR LIGHTING FIXTURE SCHEDULE		
FAMILY	TYPE	COUNT
Ceiling Light - Flat Round	60W - 120V	2
Downlight - Fluorescent Strip	48"	2
Downlight - Recessed Can	6" 100 watt Incandescent	29
Downlight - Strip		3
Downlight - Wet Location	6" 60 watt Incandescent	2
Entourage - Glo-Ball Floor Lamp	Entourage - Glo-Ball Floor Lamp	1
Exterior Light	120V 2	5
Floor_light_perfect_for_exterior_16733	100mm Light + 20mm Border	4
Pendant Light - Cylinder Pendant C	Pendant Light - Cylinder Pendant C	3
Pendant Light - Quadruple Cube Pendant	Pendant Light - Quadruple Cube Pendant	1
Vanity-wall_mounted	White	2
Wall_Light_15611	25 Watt	2



1 MAIN FLOOR PLAN - CONCEPTUAL ELECTRICAL
1/4" = 1'-0"

North

30' 15' 0' 30' 60'
SCALE : 1" = 30'-0"

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FRONT RANGE COMMUNITY COLLEGE

E1
MAIN FLOOR PLAN - CONCEPTUAL ELECTRICAL PLANS

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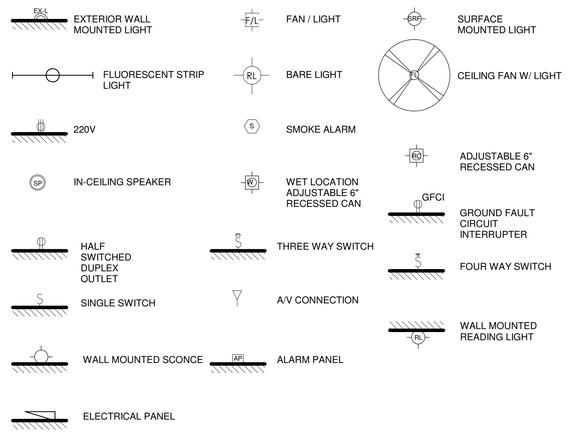
NOT FOR CONSTRUCTION

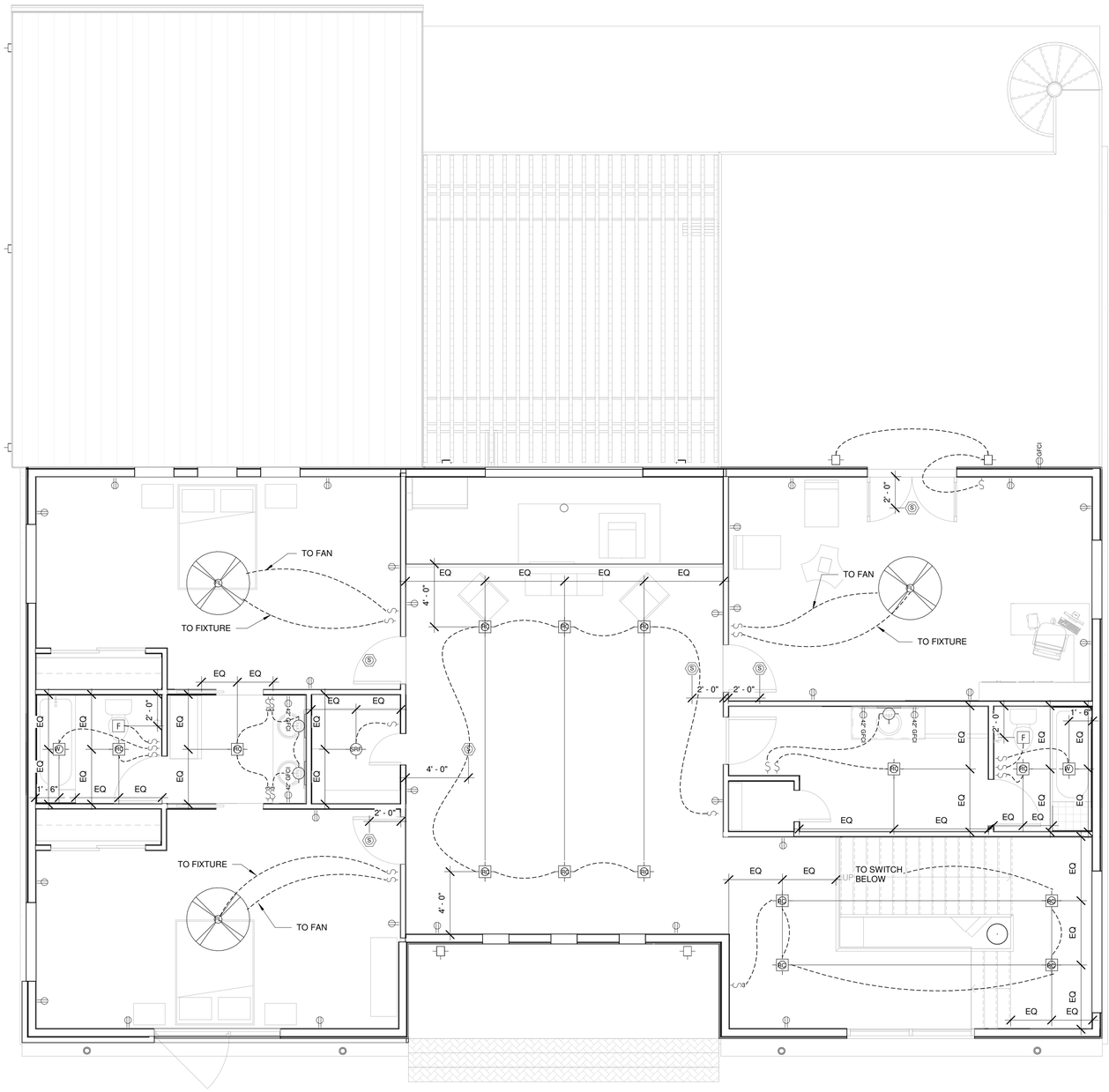
FRONT RANGE COMMUNITY COLLEGE



ELECTRICAL LEGEND
1/2" = 1'-0"

UPPER FLOOR ELECTRICAL FIXTURE SCHEDULE		
FAMILY	TYPE	COUNT
Ceiling Fan - Modern	White 42"	3
Exhaust Fan - Ceiling	Exhaust Fan - Ceiling	2
Outlet-Duplex		32
Smoke Detector	Smoke Detector	6
Switch-Single	Single	22

UPPER FLOOR LIGHTING FIXTURE SCHEDULE		
FAMILY	TYPE	COUNT
Ceiling - Flat Round	100 Watt - Icandescent	1
Downlight - Recessed Can	6" 100 watt Incandescent	14
Downlight - Wet Location	6" 60 watt Incandescent	2
Exterior Light	120V 2	2
Vanity-wall_mounted	White	3



1 UPPER FLOOR PLAN - CONCEPTUAL ELECTRICAL
1/4" = 1'-0"

North

30' 15' 0' 30' 60'
SCALE : 1" = 30'-0"

GRATTAROLA RESIDENCE
3645 W 112th Ave
Westminster, Colorado 80031

FRONT RANGE COMMUNITY COLLEGE

E2
UPPER FLOOR PLAN - CONCEPTUAL ELECTRICAL PLANS

5/4/2021 8:15:05 PM

FOUNDATION RELATED EARTHWORK

EXCAVATION

1. EXCAVATE SUBSOIL TO ACCOMMODATE NEW FOUNDATION TO DEPTH SHOWN ON DRAWINGS. HAND TRIM EXCAVATIONS. REMOVE LOOSE MATERIAL.

2. NOTIFY GEOTECHNICAL ENGINEER A MINIMUM OF 72 HOURS PRIOR TO EXCAVATIONS AND DRILLED PIER INSTALLATION TO SCHEDULE A REVIEW OF NATIVE SOIL CONDITIONS.

3. PROTECT THE SITE AND ALL CONSTRUCTION, EXISTING AND PROPOSED, FROM THE EFFECTS OF FREEZING OR FROST ACTION. SUBMITTALS FOR REVIEW:

1. SUBMIT SIEVE ANALYSIS AND STANDARD MOISTURE-DENSITY CURVE FOR EACH BACKFILL MATERIAL. RESUBMIT WHENEVER A NEW PIT OR SUBSTANTIALLY DIFFERENT MATERIAL IS USED.

BACKFILL AND COMPACTION

1. PLACE AND COMPACT BACKFILL IN EQUAL CONTINUOUS LAYERS NOT EXCEEDING 8" OF COMPACTED DEPTH FOR HAND HELD COMPACTION EQUIPMENT AND A MAXIMUM OF 12" INCHES COMPACTED DEPTH FOR VIBRATORY ROLLERS.

2. MAINTAIN OPTIMUM MOISTURE CONTENT OF BACKFILL MATERIALS TO ATTAIN COMPACTION DENSITY.

3. BACKFILL SIMULTANEOUSLY ON EACH SIDE OF FOUNDATION WALLS THAT ARE NOT DESIGNED FOR RETAINING SOIL ON ONE SIDE.

4. DO NOT BACKFILL CONCRETE WALLS UNTIL FLOOR FRAMING SUPPORTING TOP OF WALLS IS IN PLACE.

5. COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH ASTM D2922, TEST METHODS FOR SOIL BY NUCLEAR METHODS. MAXIMUM DENSITY SHALL BE DETERMINED BY THE MODIFIED PROCTOR METHOD, ASTM D1557.

BACKFILL REQUIREMENTS:

1. FILL WITHIN BUILDING ENVELOPE:
a. MATERIAL: GRANULAR BACKFILL
b. COMPACTION: 95% MODIFIED PROCTOR
c. TESTING: EVERY OTHER LIFT; EVERY 1000 SF

2. BACKFILL ALONG EXTERIOR OF BUILDING AT FROST WALLS:
a. MATERIAL: SUITABLE NATIVE SOIL
b. COMPACTION: 90% MODIFIED PROCTOR

3. GRAVEL BELOW SLABS:
a. MATERIAL: CRUSHED GRAVEL, GRANULAR BACKFILL
b. COMPACTION: 95% MODIFIED PROCTOR
c. TESTING: EVERY 1000 SF

MATERIALS:

1. GRANULAR BACKFILL:

SIEVE DESIGNATION	% BY WEIGHT PASSING SIEVES
3 INCH	100
NO. 4	45-75
NO. 100	0-12
NO. 200	0-6

2. CRUSHED GRAVEL:

SIEVE DESIGNATION	% BY WEIGHT PASSING SIEVES
2 INCH	100
1 1/2 INCH	90-100
NO. 4	30-60
NO. 100	0-12
NO. 200	0-6

3. CRUSHED STONE:

SIEVE DESIGNATION	% WEIGHT BY PASSING SIEVES
1 INCH	100
¾ INCH	90-100
3/8 INCH	20-55
No.4	0-10
No.8	0-5

4. SUITABLE NATIVE SOIL: ON SITE SAND OR GRAVEL REASONABLY FREE OF LOAM, SILT, CLAY, OR ORGANIC MATTER.

CAST-IN-PLACE CONCRETE

1. CODES AND STANDARDS: COMPLY WITH THE PROVISIONS OF THE LATEST EDITIONS OF:
a. ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"
b. ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE"
c. ACI 305 "HOT WEATHER CONCRETING"
d. ACI 306 "STANDARD SPECIFICATION FOR COLD WEATHER CONCRETING"
e. ACI 308 "STANDARD PRACTICE FOR CURING CONCRETE".

2. PRIOR TO PLACEMENT OF CONCRETE, SUBMIT TO ENGINEER MIX DESIGN INCLUDING TECHNICAL DATA SHEETS ON ANY ADMIXTURES TO BE USED.

3. OMITTED
a. OMITTED
b. OMITTED
c. OMITTED

4. OMITTED

5. SUBMIT MIX DESIGN AND EITHER TRIAL MIX DESIGNS OR HISTORIC FIELD DATA FOR APPROVAL IN ACCORDANCE WITH ACI 318, CHAPTER 5.

6. COMPRESSIVE STRENGTH AT 28 DAYS:
a. FOUNDATION WALLS AND FOOTINGS, INTERIOR SLABS: 3000 PSI
b. EXTERIOR SLABS: 4000 PSI

8. TRANSIT MIX SHALL CONFORM TO ASTM C94.

9. MINIMUM CEMENT CONTENT FOR 3000 PSI CONCRETE IS 517 POUNDS PER CUBIC YARD.

10. MINIMUM CEMENT CONTENT FOR 4000 PSI CONCRETE IS 564 POUNDS PER CUBIC YARD.

11. MAXIMUM AGGREGATE SIZE SHALL BE 3/4".

12. SLUMP: 3" TO 5".

13. AIR ENTRAINMENT OF 4 TO 6% BY VOLUME. DO NOT ADD AIR ENTRAINING ADMIXTURES FOR INTERIOR SLABS ON GRADE.

14. NO CHLORIDE OR OTHER UNAUTHORIZED ADMIXTURES SHALL BE USED.

15. PLACE NO CONCRETE WHEN AMBIENT TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT OR MORE THAN 90 DEGREES FAHRENHEIT UNLESS PLACEMENT PROCEDURE IS IN COMPLIANCE WITH ACI 305 OR ACI 306.

4. COMPLY WITH ACI CODES AND PLACE CONCRETE IN A CONTINUOUS OPERATION WITHIN PLANNED JOINTS OR SECTIONS. DO NOT PERMIT COLD JOINTS TO OCCUR.

1. CURING: BEGIN INITIAL CURING AS SOON AS FREE WATER HAS DISAPPEARED FROM EXPOSED SURFACES. WHERE POSSIBLE, KEEP CONTINUOUSLY WET FOR 72 HOURS. CONTINUE CURING BY USE OF MOISTURE RETAINING COVER OR MEMBRANE-FORMING CURING COMPOUND.

2. GROUT: PRE-MIXED, NON-SHRINK, WITH MINIMUM COMPRESSIVE STRENGTH OF 7000 PSI AT 28 DAYS AS MANUFACTURED BY FIVE STAR PRODUCTS, INC, OR APPROVED EQUIVALENT.

3. NO CONCRETE SHALL BE DROPPED MORE THAN 4 FEET INSIDE A FORM.

CONCRETE FORMWORK

1. CONCRETE FORMS SHALL BE CLEAN AND FREE FROM DEBRIS. IF FORMS ARE COATED WITH A RELEASE AGENT, THE RELEASE AGENT SHALL BE COLORLESS MINERAL OIL WHICH SHALL NOT STAIN CONCRETE OR ABSORB MOISTURE OR IMPAIR NATURAL BONDING OF CONCRETE.

2. SOAK INSIDE SURFACE OF UNTREATED FORMWORK WITH WATER PRIOR TO USE.

3. DO NOT DAMAGE CONCRETE DURING FORM STRIPPING.

4. OBTAIN APPROVAL BEFORE FRAMING OPENINGS IN STRUCTURAL MEMBERS WHICH ARE NOT INDICATED ON DRAWINGS.

5. PROVIDE BRACING TO ENSURE STABILITY OF FORMWORK.

6. DO NOT REMOVE FORMS OR BRACING UNTIL CONCRETE HAS GAINED SUFFICIENT STRENGTH TO CARRY ITS OWN WEIGHT AND IMPOSED LOADS.

7. UNLESS OTHERWISE NOTED, CENTER ALL FOUNDATION PIERS AND FOOTINGS ON COLUMN CENTERLINES.

CONCRETE REINFORCING

1. REINFORCING STEEL SHALL BE ASTM A615, 60 KSI YIELD GRADE, DEFORMED STEEL BARS PER ASTM A305.
2. LAP HORIZONTAL BARS 30 BAR DIAMETERS UNLESS NOTED OTHERWISE.

3. WELDED STEEL WIRE FABRIC SHALL BE ASTM A185. LAP A MINIMUM OF ONE MESH.

4. CHAIRS AND SPACERS SHALL BE PLACED TO ADEQUATELY SUPPORT REINFORCING DURING PLACEMENT. FOREIGN MATERIALS SUCH AS WOOD OR OTHER UNSUITABLE SUPPORTS SHALL NOT BE USED TO SUPPORT REINFORCING. SET WIRE TIES SO ENDS ARE DIRECTED INTO CONCRETE WHERE CONCRETE WILL BE EXPOSED.

5. CONCRETE CLEAR COVER FOR REINFORCEMENT (UNLESS SHOWN OTHERWISE):
a. BOTTOM OF FOOTINGS AND SLABS ON GRADE: 3".
b. FOUNDATION WALLS AND EXTERIOR WALLS: 2".
c. TOP AND BOTTOM OF ELEVATED SLABS: 3/4".
d. ALL FACES OF PIERS: 1-1/2".

RELATED ITEMS

1. OMITTED

STRUCTURAL STEEL

SUBMITTALS FOR REVIEW

1. SHOP DRAWINGS: INDICATE PROFILES, SIZES, SPACING, LOCATIONS OF STRUCTURAL MEMBERS, DECKING, OPENINGS, ATTACHMENTS, AND FASTENERS. SHOW ALL CONNECTION DETAILS. PROVIDE DESIGN OF CONNECTIONS NOT DETAILED ON DRAWINGS. INDICATE WELDED CONNECTIONS WITH AWS A2.0 WELDING SYMBOLS. INDICATE NET WELD LENGTHS.

SUBMITTALS FOR INFORMATION

1. MANUFACTURER'S MILL CERTIFICATE: CERTIFY THAT PRODUCTS MEET OR EXCEED SPECIFIED REQUIREMENTS.

2. MILL TEST REPORTS: SUBMIT INDICATING STRUCTURAL STRENGTH, DESTRUCTIVE AND NON-DESTRUCTIVE TEST ANALYSIS.

3. WELDERS CERTIFICATES: CERTIFY WELDERS EMPLOYED ON THE WORK, VERIFYING AWS QUALIFICATION WITHIN THE PREVIOUS 12 MONTHS.

QUALITY ASSURANCE

1. FABRICATE STRUCTURAL STEEL MEMBERS IN ACCORDANCE WITH AISC CODE OF STANDARD PRACTICE.

2. PERFORM WORK IN ACCORDANCE WITH AISC SECTION 10.

3. FABRICATOR AND ERECTOR: COMPANY SPECIALIZING IN PERFORMING THE WORK OF THIS SECTION WITH MINIMUM FIVE YEARS EXPERIENCE.

MATERIALS

1. STRUCTURAL STEEL WIDE FLANGE MEMBERS: ASTM A992/A572, GRADE 50

2. ANGLES, CHANNELS, PLATE AND OTHER HOT ROLLED SHAPES: ASTM A36

3. STRUCTURAL TUBING: ASTM A500, GRADE B.

4. PIPE COLUMNS: ASTM A53 GRADE B.

5. BOLTS, NUTS, AND WASHERS: MINIMUM 3/4" DIAMETER ASTM A325 BOLTS, ASTM A563 NUTS WITH HARDENED WASHERS, GALVANIZED TO ASTM A153 FOR GALVANIZED STRUCTURAL MEMBERS. ASTM A490 BOLTS REQUIRED WHERE NOTED ON DRAWINGS.

6. ANCHOR BOLTS: ASTM A-307 FOR HEADED BOLT ASTM A-36 FOR THREADED ROD

7. WELDING MATERIALS: AWS D1.1; TYPE REQUIRED FOR MATERIALS BEING WELDED.

8. GROUT: NON-SHRINK TYPE, PRE-MIXED COMPOUND CONSISTING OF NON-METALLIC AGGREGATE CEMENT, WATER REDUCING AND PLASTICIZING ADDITIVES, CAPABLE OF DEVELOPING A MINIMUM COMPRESSIVE STRENGTH OF 7,000 PSI AT 28 DAYS AS MANUFACTURED BY FIVE STAR PRODUCTS, INC., FAIRFIELD, CT, OR APPROVED EQUIVALENT.

9. SHOP AND TOUCH-UP PRIMER: TNEMEC SERIES FM88 OR APPROVED EQUIVALENT.

10. TOUCH-UP PRIMER FOR GALVANIZED SURFACES: TNEMEC SERIES 37, ZINC RICH RED APPROVED EQUIVALENT.

FINISH

1. PREPARE STRUCTURAL COMPONENT SURFACES IN ACCORDANCE WITH SSPC SP-2 FOR ENCLOSED STEEL TO RECEIVE STANDARD PRIMER AND SSPC SP-6 FOR EXPOSED STEEL.

2. SHOP PRIME STRUCTURAL STEEL MEMBERS. DO NOT PRIME SURFACES THAT WILL BE EXPOSED, FIREPROOFED, FIELD WELDED OR IN CONTACT WITH CONCRETE.

3. PRIME AND PAINT ARCHITECTURALLY EXPOSED STEEL AFTER INSTALLATION.

4. WHERE INDICATED, STRUCTURAL STEEL MEMBERS ARE TO BE GALVANIZED IN ACCORDANCE WITH ASTM A123. PROVIDE MINIMUM 1.25 OZ/SQ FT GALVANIZED COATING.

ERECTION

1. ALLOW FOR ERECTION LOADS, AND FOR SUFFICIENT TEMPORARY BRACING TO MAINTAIN STRUCTURE SAFE, PLUMB, AND IN TRUE ALIGNMENT UNTIL COMPLETION OF ERECTION AND INSTALLATION OF PERMANENT BRACING.

2. FIELD WELD COMPONENTS INDICATED ON DRAWINGS AND SHOP DRAWINGS.

3. DO NOT FIELD CUT OR ALTER STRUCTURAL MEMBERS WITHOUT APPROVAL OF ARCHITECT/ENGINEER.

4. AFTER ERECTION, PRIME WELDS, ABRASIONS, AND SURFACES NOT SHOP PRIMED, EXCEPT SURFACES TO BE IN CONTACT WITH CONCRETE.
5. GROUT UNDER BASE PLATES

WOOD FRAMING AND SHEATHING
GENERAL

1. UNLESS OTHERWISE SPECIFIED, EACH PIECE OF LUMBER SHALL BEAR THE GRADE MARK, STAMP, OR OTHER IDENTIFYING MARKS INDICATING GRADES OF MATERIAL, AND RULES OR STANDARDS UNDER WHICH PRODUCED. SUCH IDENTIFYING MARKS ON A MATERIAL SHALL BE IN ACCORDANCE WITH THE RULE OR STANDARD UNDER WHICH MATERIAL IS PRODUCED, INCLUDING REQUIREMENTS FOR QUALIFICATIONS AND AUTHORITY OF THE INSPECTION ORGANIZATION, USAGE OF AUTHORIZED IDENTIFICATION, AND INFORMATION INCLUDED IN THE IDENTIFICATION. THE INSPECTION AGENCY FOR LUMBER SHALL BE APPROVED BY THE BOARD OF REVIEW, AMERICAN LUMBER STANDARDS COMMITTEE, TO GRADE SPECIES USED.

2. PROTECT LUMBER AND OTHER PRODUCTS FROM DAMPNESS BOTH DURING AND AFTER DELIVERY AT THE SITE. PILE SHEATHING AND LUMBER IN STACKS IN SUCH A MANNER AS TO PROVIDE ADEQUATE AIR CIRCULATION AND TO PREVENT WARPING. LOCATE STACKS IN WELL DRAINED AREAS, SUPPORTED AT LEAST SIX INCHES ABOVE GRADE AND COVER TO PROTECT LUMBER FROM RAIN, SNOW AND DRIVING RAIN.

3. STORE SEASONED MATERIALS IN DRY PORTIONS OF BUILDING.

4. PROTECT SHEET MATERIALS FROM CORNERS BREAKING AND DAMAGING SURFACES WHILE UNLOADING.

5. NOMINAL SIZES ARE INDICATED EXCEPT AS SHOWN BY DETAIL DIMENSIONS. PROVIDE ACTUAL SIZES AS REQUIRED BY PRODUCT STANDARD 20, DEPARTMENT OF COMMERCE.

6. MAXIMUM MOISTURE CONTENT SHALL NOT EXCEED 19%.

MATERIALS

1. 2X6 AND 2X4 BEARING WALLS, INTERIOR AND EXTERIOR LOCATIONS: DOUGLAS FIR-LARCH NO.2 AS GRADED BY WWPA

2. STRUCTURAL ROOF AND FLOOR FRAMING: NO.2 AS GRADED BY WWPA

3. PRESERVATIVE PRESSURE TREATED LUMBER: SOUTHERN PINE NO. 2, AS GRADED BY SPIB

4. LAMINATED VENEER LUMBER (LVL):
a. PROVIDE LVL HEADERS AND BEAMS AS INDICATED.
b. LVL FRAMING SHALL BE LAMINATED DOUGLAS FIR OR SOUTHERN PINE (GP LAM BY GEORGIA PACIFIC OR MICROLAM BY TRUS-JOIST OR EQUIVALENT) MEETING THE FOLLOWING MINIMUM ALLOWABLE STRESS CRITERIA:

FB (BENDING STRESS) = 2600 PSI
FV (HORIZ. SHEAR STRESS) = 285 PSI
E (MODULUS OF ELASTICITY) = 1,900,000 PSI
FC (COMPRESSION PERPENDICULAR TO GRAIN) = 750 PSI

6. PARALLEL STRAND LUMBER (PSL):
a. PROVIDE PSL BEAMS AND POSTS AS INDICATED.
b. PSL FRAMING (PARALLAM BY TRUS-JOIST OR EQUIVALENT) TO MEET THE FOLLOWING MINIMUM ALLOWABLE STRESS CRITERIA:

FB (BENDING STRESS) = 2900 PSI
FV (HORIZ. SHEAR STRESS) = 290 PSI
E (MODULUS OF ELASTICITY) = 2,000,000 PSI
FC (COMPRESSION PERPENDICULAR TO GRAIN) = 750 PSI

7. PREFABRICATED WOOD I-JOISTS (TJI):
a. PROVIDE TJI JOISTS AS INDICATED ON DRAWINGS.
b. I-JOISTS SHALL BE TJI'S AS MANUFACTURED BY TRUS-JOIST OR APPROVED EQUIVALENT.

8. MISCELLANEOUS LUMBER: PROVIDE WOOD FOR SUPPORT OR ATTACHMENT OF THE WORK INCLUDING NON-BEARING PARTITIONS, CANT STRIPS, BUCKS, NAILERS, BLOCKING, FURRING, GROUNDS, STRIPPING AND SIMILAR MEMBERS. PROVIDE LUMBER OF SIZES AND SHAPES INDICATED. GRADE: HEM-FIR STUD GRADE AS GRADED BY WWPA.

9. ROOF, FLOOR AND WALL SHEATHING: APA RATED OR ADVANTECH VIP+ SHEATHING, THICKNESS AS INDICATED, SPAN RATING AS REQUIRED TO SUIT SUPPORT SPACING INDICATED, EXPOSURE DURABILITY 1, THREE SPAN MINIMUM.

10. FASTENERS AND ANCHORS: FURNISH ITEMS OF ROUGH HARDWARE, METAL CONNECTORS, BOLTS, ETC., REQUIRED TO COMPLETE THE WORK. BOLTS, NUTS AND WASHERS SHALL BE HOT DIPPED ELECTRO GALVANIZED STEEL. FASTENERS AND ANCHORS IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE STAINLESS STEEL OR STEEL HOT DIP GALVANIZED TO G-185.

11. WOOD CONNECTORS SHALL BE BY SIMPSON STONG-TIE OR APPROVED EQUIVALENT. SIMPSON STRONG-TIE CONNECTORS SHALL CONFORM TO MANUFACTURER'S COATING RECOMMENDATIONS. UNLESS OTHERWISE NOTED ON DRAWINGS, USE THE FOLLOWING CONNECTORS:
a. TJI JOISTS: IUS HANGERS.
b. 2x JOISTS: LUS HANGERS.

c. POST BASES: AB OR ABU POST BASES.
d. POST CAPS: AC AND ACE POST CAPS.
e. LVL BEAMS: HU AND HUC BEAM HANGERS.

12. SUBFLOOR GLUE: APA AFG-01, WATERPROOF OF WATER SOLVENT BASE, AIR CURE TYPE, CARTRIDGE DISPENSED.

13. WOOD PRESERVATIVE (PRESSURE TREATMENT): AWPA TREATMENT ACQ USING WATER BORNE PRESERVATIVE WITH 0.40 PERCENT RETAINAGE.

EXECUTION

1. SET STRUCTURAL MEMBERS LEVEL AND PLUMB, IN CORRECT POSITION.

2. MAKE PROVISIONS FOR ERECTION LOADS, AND FOR SUFFICIENT TEMPORARY BRACING TO MAINTAIN STRUCTURE SAFE, PLUMB, AND IN TRUE ALIGNMENT UNTIL COMPLETION OF ERECTION AND INSTALLATION OF PERMANENT BRACING.

3. PLACE HORIZONTAL MEMBERS, CROWN SIDE UP.

4. CONSTRUCT LOAD BEARING FRAMING AND CURB MEMBERS FULL LENGTH WITHOUT SPLICES.

5. DOUBLE MEMBERS AT OPENINGS OVER 24 INCHES WIDE. SPACE SHORT STUDS OVER AND UNDER OPENING TO STUD SPACING.

6. CONSTRUCT DOUBLE JOIST HEADERS AT FLOOR AND CEILING OPENINGS AND UNDER WALL STUD PARTITIONS THAT ARE PARALLEL TO FLOOR JOISTS. FRAME RIGIDLY INTO JOISTS.

7. BRIDGE JOISTS FRAMING IN EXCESS OF 8 FEET SPAN AT MID-SPAN AND WHERE SHOWN ON DRAWINGS. FIT SOLID BLOCKING OR BRIDGING AT ENDS OF MEMBERS.

8. PLACE FULL WIDTH CONTINUOUS SILL FLASHINGS UNDER FRAMED WALLS ON CEMENTITIOUS FOUNDATIONS. LAP FLASHING JOINT 4 INCHES MINIMUM.

9. SECURE ROOF SHEATHING WITH LONGER EDGE PERPENDICULAR TO FRAMING MEMBERS AND WITH ENDS STAGGERED AND SHEET ENDS OVER BEARING.

10. USE SHEATHING CLIPS BETWEEN SHEETS BETWEEN ROOF FRAMING MEMBERS.

11. PROVIDE SOLID EDGE BLOCKING BETWEEN SHEETS.

12. WHERE TONGUE AND GROOVE PLYWOOD IS USED, FULLY ENGAGE TONGUE AND GROOVE EDGES.

13. SECURE WALL SHEATHING WITH LONG DIMENSION PERPENDICULAR TO WALL STUDS, WITH ENDS OVER FIRM BEARING AND STAGGERED.

14. SECURE SUB-FLOOR SHEATHING WITH LONGER EDGE PERPENDICULAR TO FLOOR FRAMING AND WITH END JOINTS STAGGERED AND SHEET ENDS OVER BEARING. ATTACH WITH SUB-FLOOR GLUE AND #8 SCREWS.

15. TOLERANCES:
a. FRAMING MEMBERS: 1/4 INCH FROM TRUE POSITION, MAXIMUM.
b. SURFACE FLATNESS OF FLOOR: 1/4 INCH IN 10 FEET MAXIMUM, AND 1/2 INCH IN 30 FEET MAXIMUM.

17. ALL POSTS AND COLUMNS FROM HEADERS AND BEAMS SHALL BEAR CONTINUOUSLY TO CONCRETE FOUNDATIONS INCLUDING BLOCKING IN FLOOR AND ROOF SPACES. BLOCKING SHALL BE OF THE SIZE AND SHAPE TO CARRY THE REQUIRED LOADING.

18. ALL BOTTOM BEARING PLATES, FOR STUD WALLS OR BEAM BEARING, SHALL BE ANCHORED TO THE FOUNDATION WITH 1/2" DIAMETER ANCHOR BOLTS AT 32" ON CENTER, UNLESS NOTED OTHERWISE.

19. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESERVATIVE PRESSURE TREATED, P.P.T.

20. ALL EXTERIOR AND INTERIOR BEARING WALLS SHALL HAVE BLOCKING SPACED AT A MAXIMUM OF 48" O.C.

PLATE CONNECTED WOOD ROOF TRUSSES

1. FIELD-VERIFY EXISTING TRUSS PROFILES AND DIMENSIONS PRIOR TO FABRICATION OF NEW TRUSSES.
2. DESIGN NEW TRUSSES USING DESIGN LOADS AS FOLLOWS: 30 PSF ROOF SNOW LOAD, 10 PSF TOP CHORD DEAD LOAD, 10 PSF BOTTOM CHORD DEAD LOAD.
3. DESIGN TO LOADINGS AND CONFIGURATIONS SHOWN ON DRAWINGS WITH DEFLECTION LIMITED TO 1/360 OF SPAN FOR SNOW AND CEILING LOAD.
4. SUBMIT TRUSS SHOP DRAWINGS INCLUDING LAYOUT PLANS CODED TO INDICATE TRUSS DESIGN LOCATIONS. FOR EACH TRUSS, INDICATE SIZES AND SPACING OF TRUSSES AND ASSOCIATED COMPONENTS, WEB AND CHORD SIZES, PLATE SIZES, FASTENER DESCRIPTIONS AND SPACINGS, LOADS AND TRUSS CAMBERS, AND FRAMED OPENINGS. SUBMIT ALL DESIGN CALCULATIONS INCLUDING DEFLECTIONS.
5. PUBLICATIONS: SUBMIT ONE COPY OF BCSI 1-03 AND BCSI B1 SUMMARY SHEET AND PROVIDE TWO COPIES TO ERECTOR TO BE KEPT ON SITE.
6. REVIEW OF TRUSS SUBMITTALS BY THE ENGINEER SHALL BE ONLY FOR CONFORMANCE WITH THE DESIGN CONCEPT AND SHALL NOT INDICATE APPROVAL OF THE DESIGN OF THE TRUSS OR ITS COMPONENTS. REVIEW SHALL BE LIMITED TO THE FOLLOWING:
   a. VERIFICATION OF CORRECT LOADING USED BY THE TRUSS ENGINEER.
   b. REVIEW OF TRUSS REACTIONS AND VERIFICATION THAT BUILDING ELEMENTS AR ADEQUATE TO SUPPORT TRUSS REACTIONS AS DETERMINED BY THE TRUSS ENG
   c. REVIEW OF TRUSS DEFLECTIONS AS CALCULATED BY THE TRUSS ENGINEER FOR SUITABILITY IN THE OVERALL BUILDING CONFIGURATION.
   d. DIMENSIONS WILL BE REVIEWED FOR CONFORMANCE WITH THE BEARING LOCATIONS AS INDICATED ON THE PROJECT DRAWINGS.
8. DESIGN AND FABRICATE TRUSSES IN ACCORDANCE WITH TRUSS PLATE INSTITUTE TPI 1-2002.
9. TRUSS HANDLING AND INSTALLATION SHALL BE IN ACCORDANCE WITH TPI BCSI 1-03.
10. DESIGN TRUSSES UNDER DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER.RUCTURAL ENGINEER EXPERIENCED IN DESIGN OF THIS WORK AND LICENSED IN COLORADO. SHOP DRAWINGS SHALL BEAR THE STAMP OF THAT PROFESSIONAL
11. MINIMUM TOP AND BOTTOM CHORD MEMBER SIZE SHALL BE 2x6. MINIMUM WEB MEMBER SIZE SHALL BE 2x4. MINIMUM STRESS VALUES SHALL MEET THE REQUIREMENTS OF HEM-FIR OR DOUGLAS FIR NO. 1/NO. 2, 19 PERCENT MAXIMUM AND 7 PERCENT MINIMUM MOISTURE CONTENT. STUD GRADE LUMBER SHALL NOT BE USED.
12. STEEL PLATE CONNECTORS SHALL BE ASTM A446 STEEL, GRADE B, HOT DIP GALVANIZED: DIE STAMPED WITH INTEGRAL TEETH THICKNESS AS DETERMINED BY TRUSS ENGINEER.
13. TRUSS BRIDGING: TYPE, SIZE AND SPACING RECOMMENDED BY TRUSS MANUFACTURER.
14. TRUSS ERECTOR SHALL VERIFY THAT SUPPORTS AND OPENINGS ARE READY TO RECEIVE TRUSSES PRIOR TO BEGINNING WORK.
15. MAKE PROVISIONS FOR ERECTION LOADS AND FOR SUFFICIENT TEMPORARY BRACING TO MAINTAIN STRUCTURE PLUMB AND IN TRUE ALIGNMENT UNTIL COMPLETION OF ERECTION AND INSTALLATION OF PERMANENT BRACING.
16. PERMANENT BRACING AS SHOWN ON PROJECT DRAWINGS AND AS INDICATED IN BCSI 1-03 SHALL BE COMPLETED NO LATER THAN IMMEDIATELY AFTER INSTALLATION OF TOP CHORD SHEATHING.
17. DO NOT FIELD CUT OR ALTER STRUCTURAL MEMBERS WITHOUT APPROVAL OF ARCHITECT AND STRUCTURAL ENGINEER.
18. TRUSSES SHALL BE INSTALLED A MAXIMUM OF 1/2 INCH FROM TRUE POSITION.

CHECK AND FILL OUT

BASIS OF DESIGN:

BUILDING CODE: 2006 IRC

DESIGN LOADS:

ROOF DEAD LOAD: 20 PSF
FLOOR LIVE LOAD: 40 PSF
FLOOR DEAD LOAD: 20 PSF (45 PSF @ SLAB ON STEEL DECKS)
GROUND SNOW LOAD (PG): 30 PSF
ROOF SNOW LOAD: 30 PSF

WIND DESIGN DATA:
BASIC WIND SPEED: 100 MPH
EXPOSURE C

SEISMIC DESIGN CATEGORY B

FOUNDATION:
REFER TO SOILS REPORT #..... BY .....
DATED: .....

ALLOWABLE END BEARING PRESSURE: 25 KSF AND MINIMUM DEAD LOAD: 7.5 KSF, 2.5 KSF SKIN FRICTION AFTER INITIAL 3 FT. OF PENETRATION INTO BEDROCK. MINIMUM OF 9 FT. PENETRATION INTO BEDROCK, MIN. PIER LENGTH OF 29 FT.

FROST LINE DEPTH - 36"

NOT FOR CONSTRUCTION

FRONT RANGE COMMUNITY COLLEGE

GRATTAROLA RESIDENCE
3645 W 112th Ave
Westminster, Colorado 80031

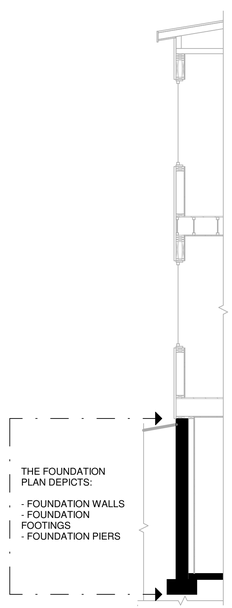
FRONT RANGE COMMUNITY COLLEGE

5/4/2021 8:15:06 PM

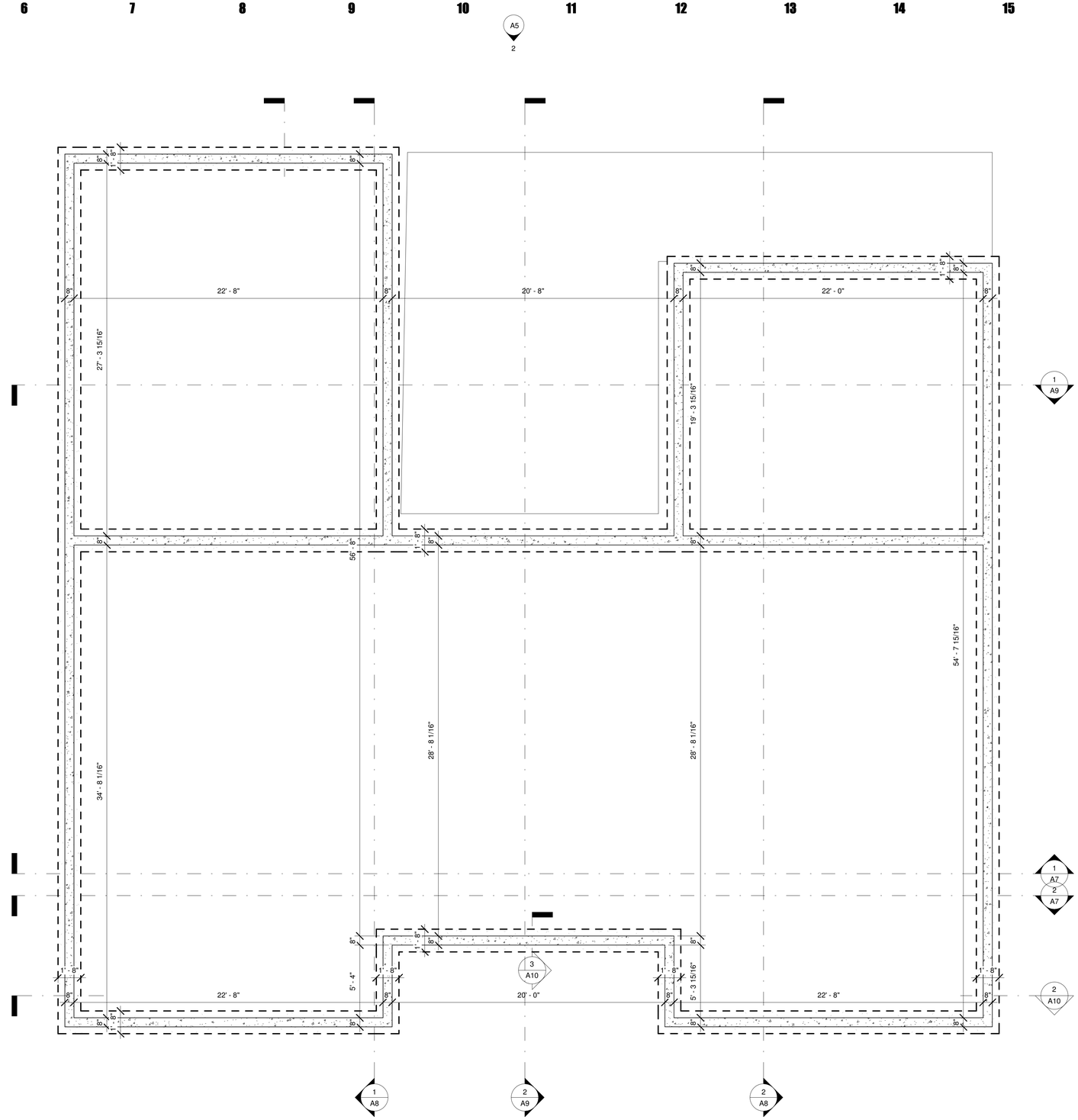
GENERAL STRUCTURAL NOTES
1/4" = 1'-0"

NOT FOR CONSTRUCTION

FRONT RANGE COMMUNITY COLLEGE



FRAMING LEGEND - FOUNDATION
1/4" = 1'-0"



1 FOUNDATION PLAN
1/4" = 1'-0"

30' 15' 0' 30' 60'
SCALE : 1" = 30'-0"

GRATTAROLA RESIDENCE
3645 W 112th Ave
Westminster, Colorado 80031

FRONT RANGE COMMUNITY COLLEGE

S1
FOUNDATION PLAN

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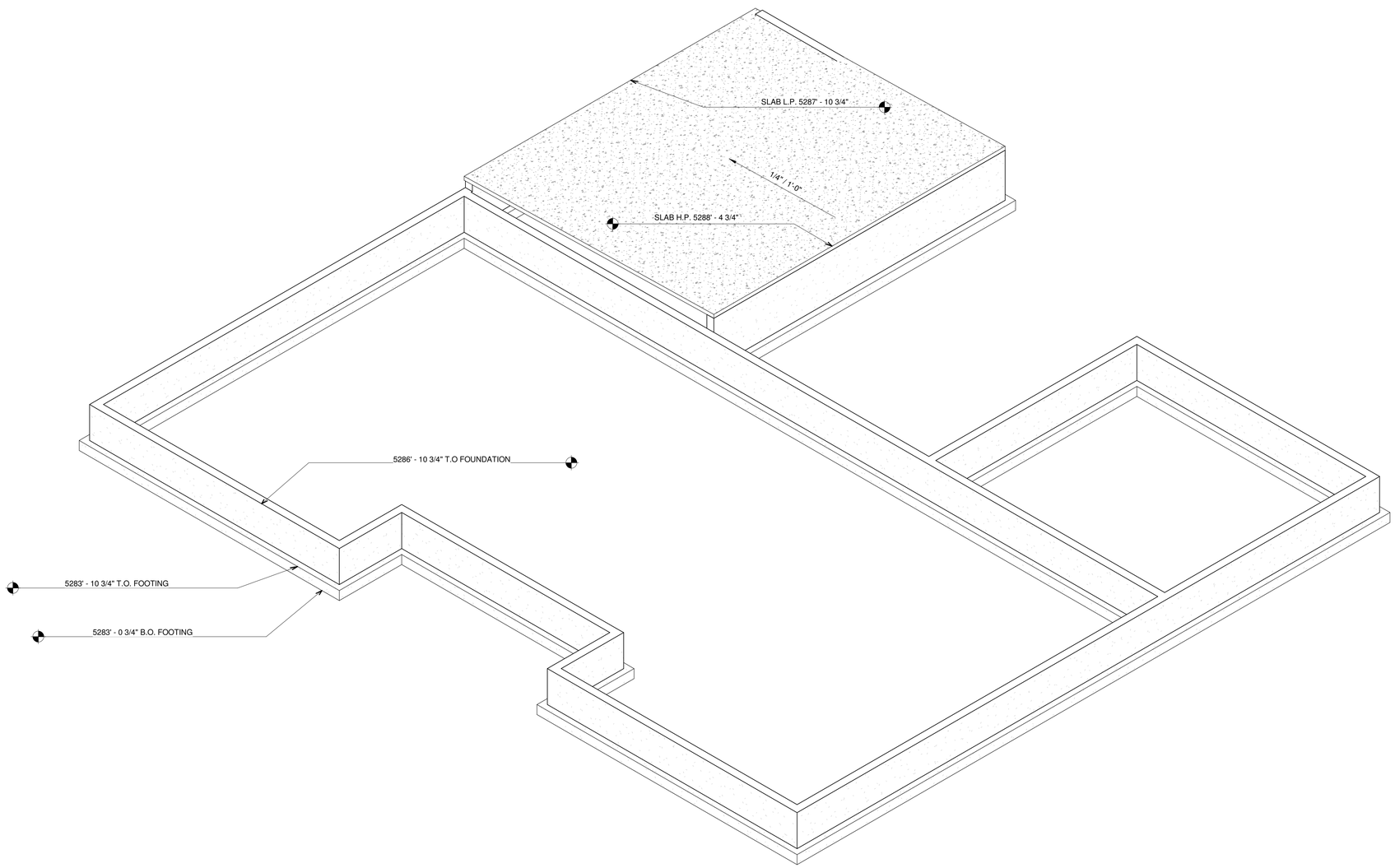
FRONT RANGE COMMUNITY COLLEGE



1 3D - FOUNDATION ONLY

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3645 W 112th Ave
Westminster, Colorado 80031

FRONT RANGE COMMUNITY COLLEGE

5/4/2021 8:15:06 PM

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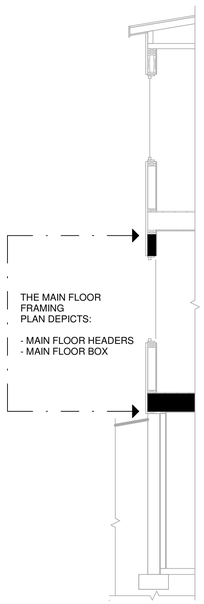
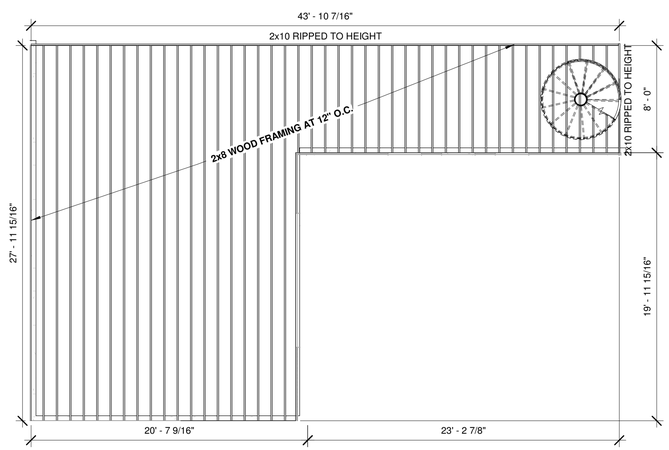
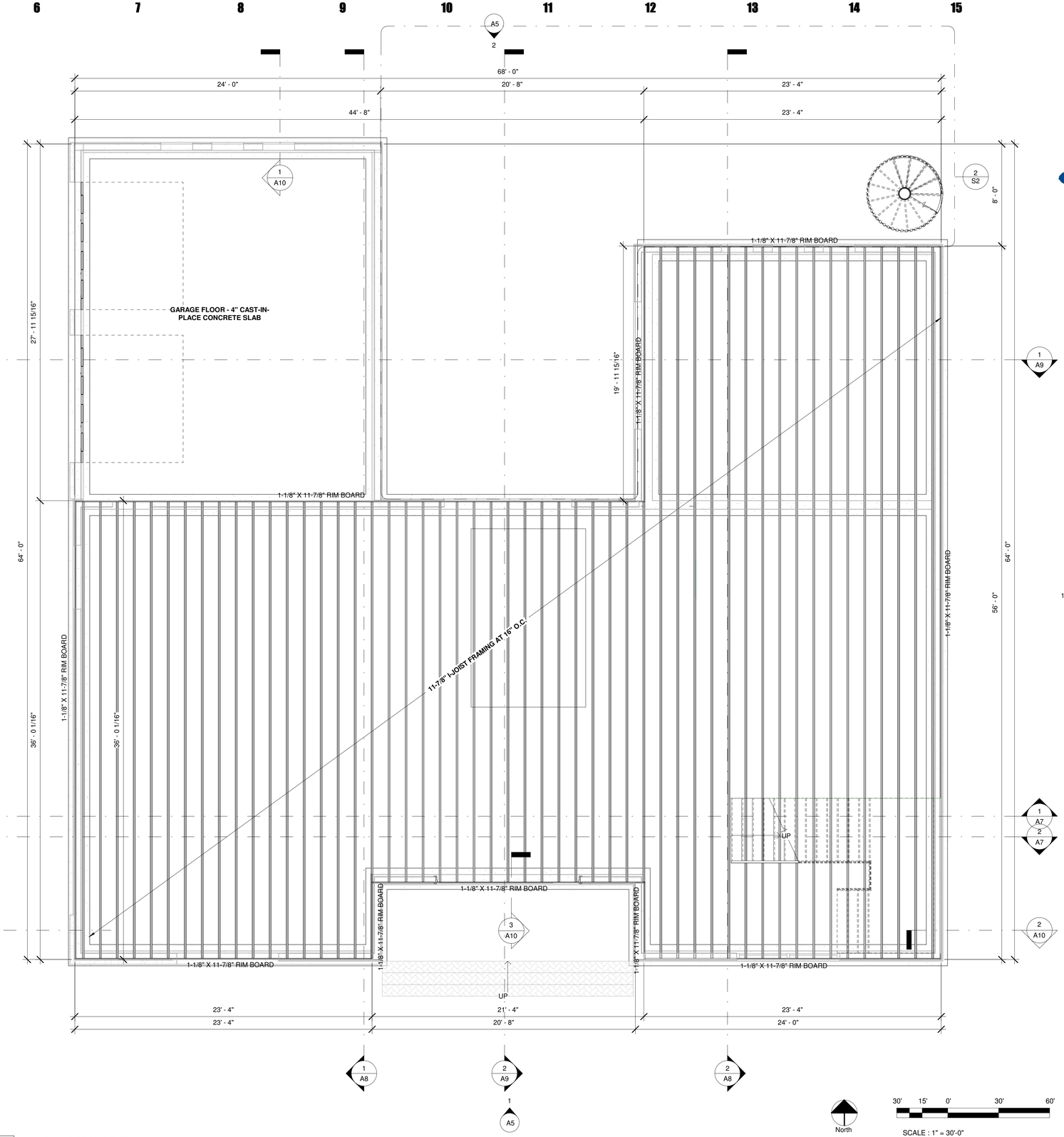
FRONT RANGE COMMUNITY COLLEGE



FRAMING LEGEND - MAIN FLOOR
1/4" = 1'-0"



2 MAIN FLOOR FRAMING PLAN - DECK FRAMING
3/16" = 1'-0"



1 MAIN FLOOR FRAMING PLAN
1/4" = 1'-0"

North

30' 15' 0' 30' 60'
SCALE : 1" = 30'-0"

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FRONT RANGE COMMUNITY COLLEGE

S2

MAIN FLOOR FRAMING PLAN

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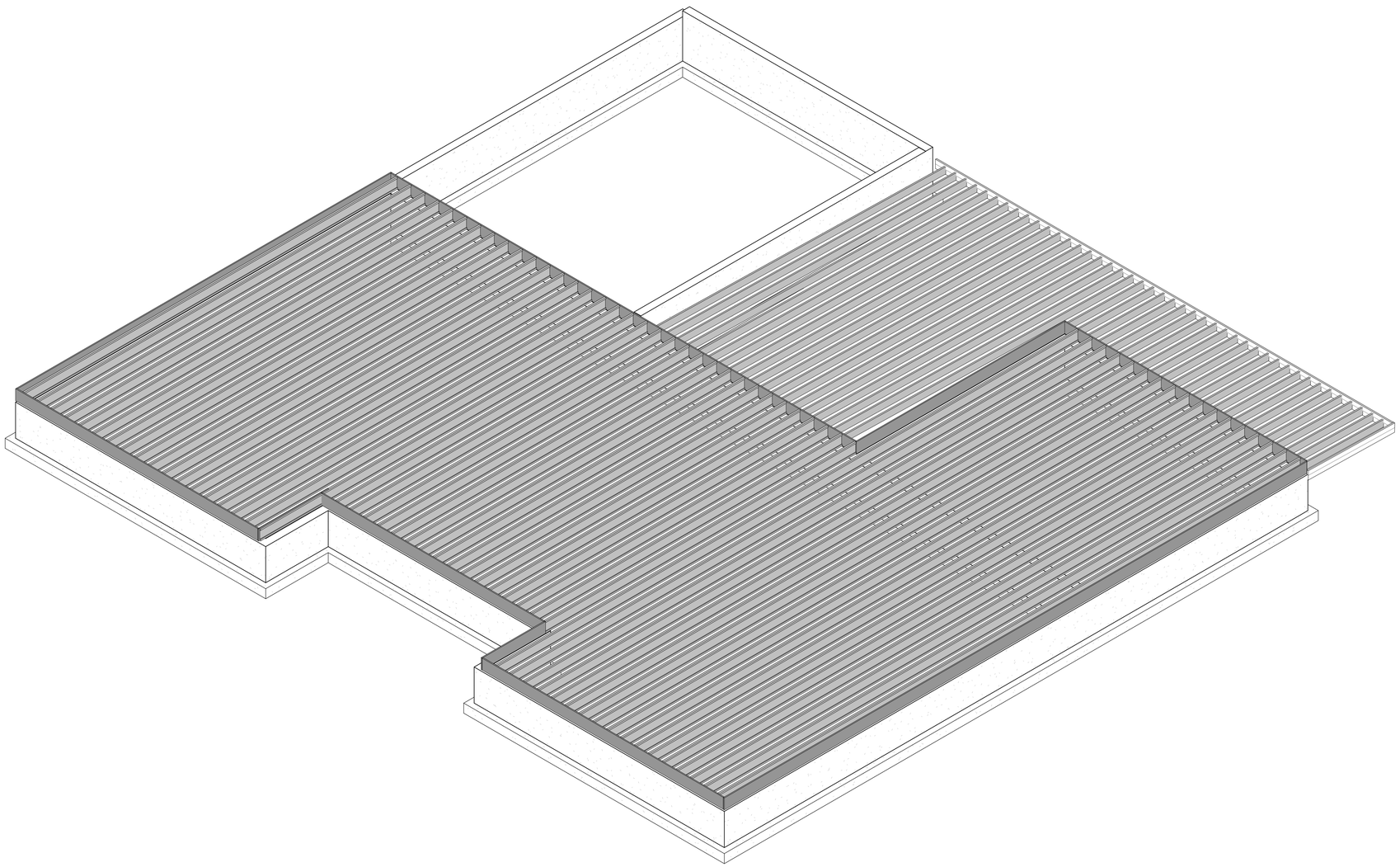
FRONT RANGE COMMUNITY COLLEGE



1 3D - MAIN FLOOR FRAMING

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FRONT RANGE COMMUNITY COLLEGE

S2.1

3D - MAIN FLOOR FRAMING VIEW

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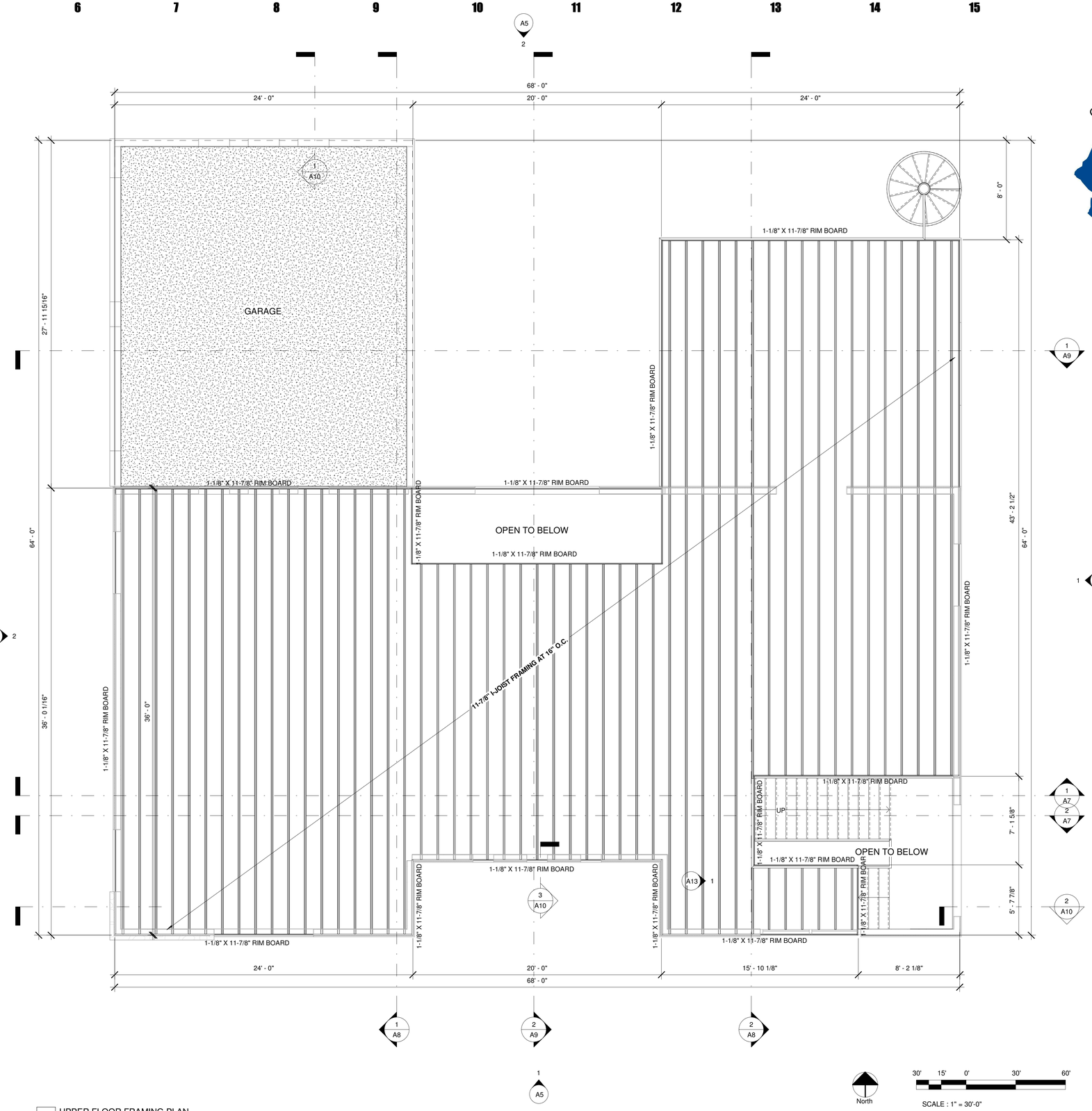
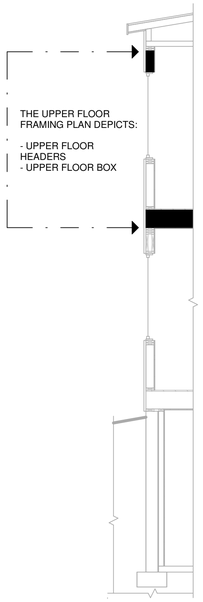
FRONT RANGE COMMUNITY COLLEGE





FRAMING LEGEND - UPPER FLOOR
1/4" = 1'-0"

1 UPPER FLOOR FRAMING PLAN
1/4" = 1'-0"

North

30' 15' 0' 30' 60'
SCALE : 1" = 30'-0"

GRATTAROLA RESIDENCE
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FRONT RANGE COMMUNITY COLLEGE

S3

UPPER FLOOR FRAMING PLAN

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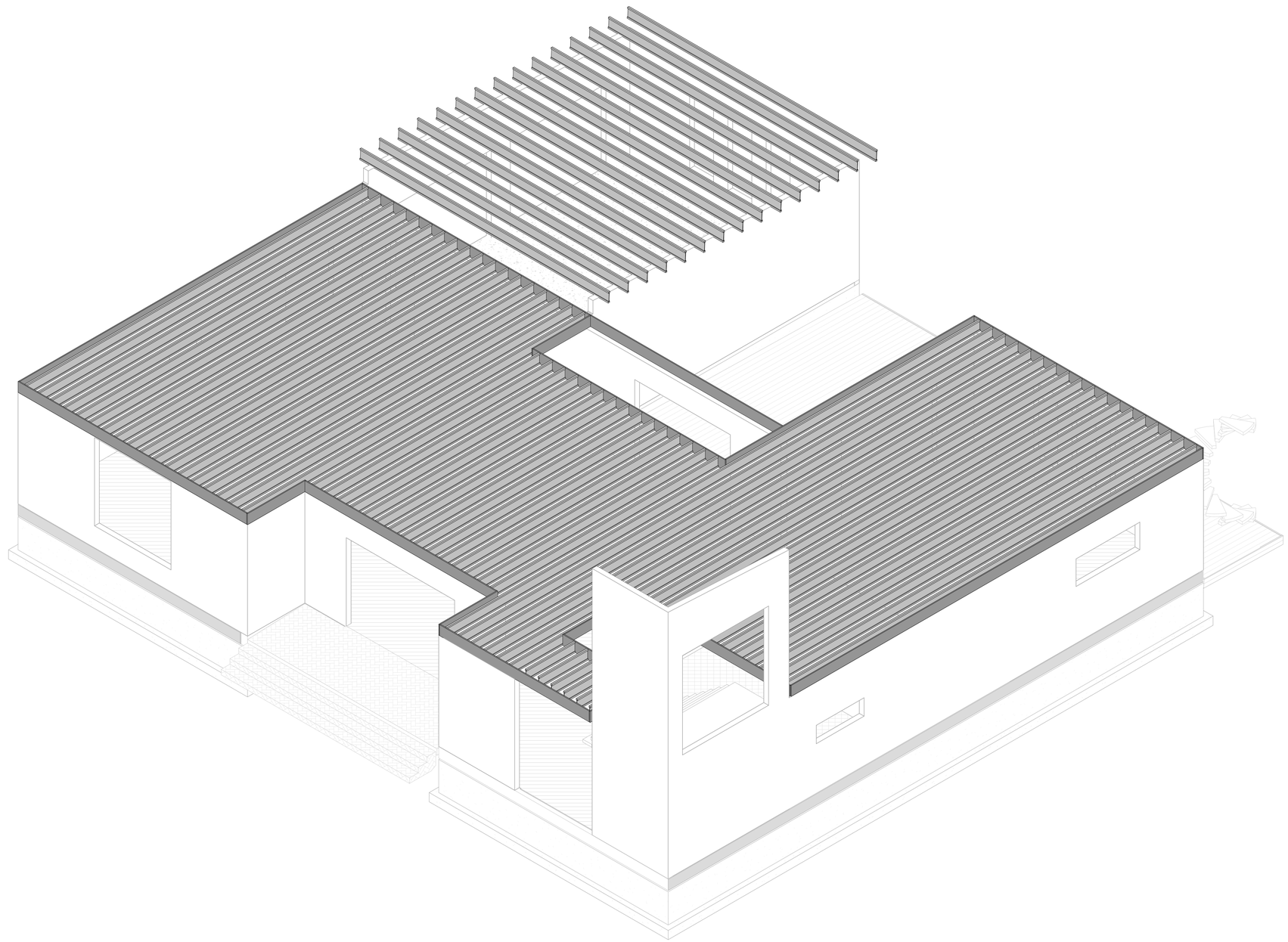
FRONT RANGE COMMUNITY COLLEGE



1 3D - UPPER FLOOR FRAMING

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FRONT RANGE COMMUNITY COLLEGE

S3.1

3D - UPPER FLOOR FRAMING VIEW

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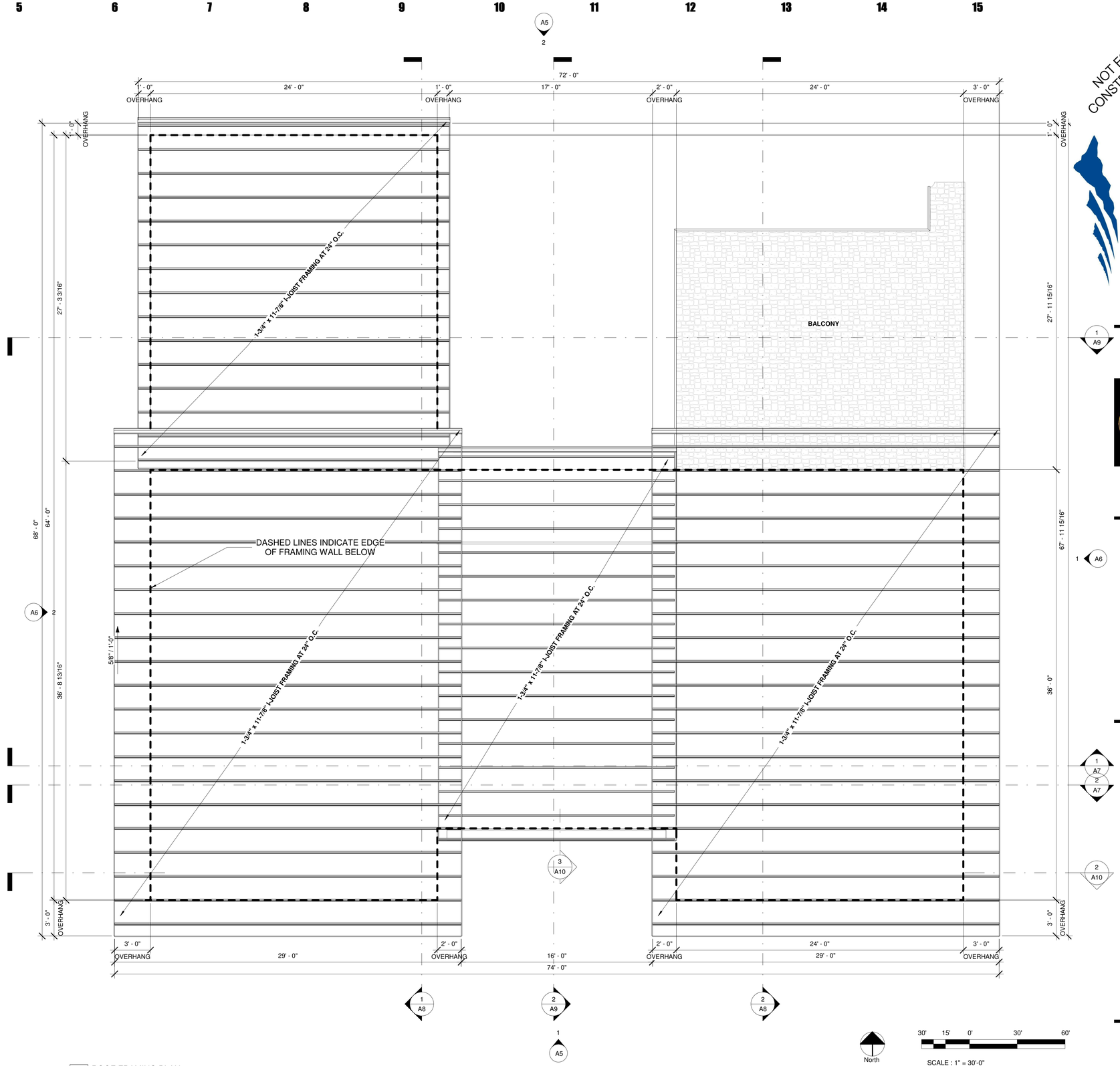
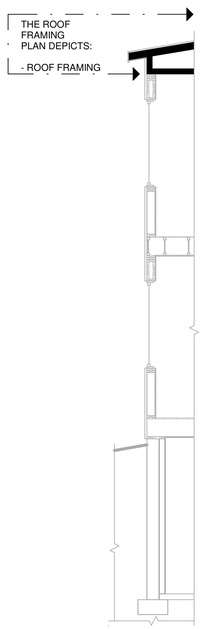
NOT FOR CONSTRUCTION



1 ROOF FRAMING PLAN
1/4" = 1'-0"



FRAMING LEGEND - ROOF
1/4" = 1'-0"

FRONT RANGE COMMUNITY COLLEGE

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FRONT RANGE COMMUNITY COLLEGE

S4
ROOF FRAMING PLAN

5/4/2021 8:15:15 PM

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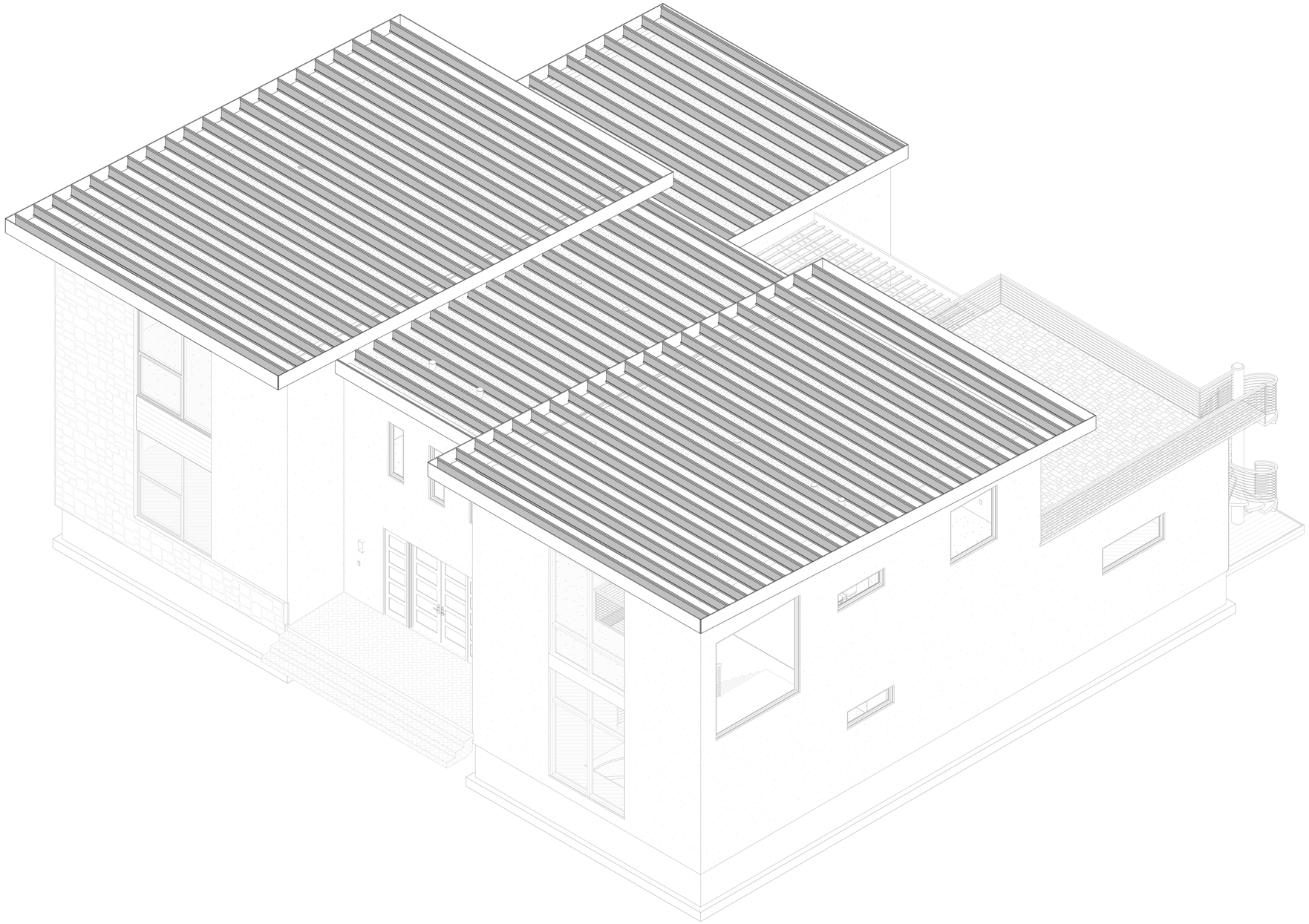
FRONT RANGE COMMUNITY COLLEGE



1 3D - ROOF FRAMING

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Westminster, Colorado 80031

FRONT RANGE COMMUNITY COLLEGE

S4.1

3D - ROOF FRAMING VIEW

5/4/2021 8:15:19 PM